Ryerson University

SENATE MEETING AGENDA

TUESDAY, NOVEMBER 5, 2019

SENATE MEETING AGENDA

Tuesday, November 5, 2019

THE REAL INSTITUTE – 424 Yonge Street, 2nd Floor

4:30 p.m. Light dinner is available

5:00 p.m. Committee of the Whole Discussion – Academic Consideration Requests: Kelly MacKay and Medhat Shehata

5:50 p.m. Senate Meeting starts

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1. Call to Order/Establishment of Quorum

2. Land Acknowledgement
"Toronto is in the 'Dish With One Spoon Territory'. The Dish With One Spoon is a treaty between the Anishinaabe, Mississaugas and Haudenosaunee that bound them to share the territory and protect the land. Subsequent Indigenous Nations and peoples, Europeans and all newcomers have been invited into this treaty in the spirit of peace, friendship and respect."

3. Approval of the Agenda
Motion: *That Senate approve the agenda for the November 5, 2019 meeting*

4. Announcements

Pages 1-7

5. Minutes of the Previous Meeting
Motion: *That Senate approve the minutes of the October 1, 2019 meeting*

6. Matters Arising from the Minutes

7. Correspondence

8. Reports

Pages 8-14

8.1 Report of the President
8.1.1 President's Update

Pages 15-16 8.2 Communications Report

8.3 Report of the Secretary
8.3.1 New student Senator from the Faculty of Science

Pages 17-88 8.4 Committee Reports
8.4.1 Report #F2019-2 of the Academic Standards Committee (ASC): K. MacKay

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Pages 17-22 8.4.1.1. Modifications of the Architectural Science program

Motion: *That Senate approve the modifications of the Architectural Science program*

Pages 22-29 8.4.1.2. New Software Engineering Option in Computer Engineering

Motion: *That Senate approve the new Software Engineering Option in Computer Engineering*

Pages 29-32 8.4.1.3. Modifications to the Mathematics and its Applications program

Motion: *That Senate approve the modifications to the Mathematics and its Applications program*

Pages 32-56 8.4.1.4. New double majors in the Faculty of Arts: Politics and Governance-Criminology; Politics and Governance-History; Politics and Governance-Sociology; Criminology-History; Criminology-Sociology; History-Sociology

Motion: *That Senate approve the new double majors in the Faculty of Arts: Politics and Governance-Criminology; Politics and Governance-History; Politics and Governance-Sociology; Criminology-History; Criminology-Sociology; History-Sociology*

Pages 56-70

8.4.1.5. Modifications to the Collaborative Nursing program

Motion: *That Senate approve the modifications to the Collaborative Nursing program*

Pages 70-72

8.4.1.6. Nine (9) course proposals for addition to the Liberal Studies elective tables

Motion: *That Senate approve the nine (9) course proposals for addition to the Liberal Studies elective tables*

Pages 72-87

8.4.1.7. For information: 1-year follow-up reports for Periodic Program Review: Graphic Communications Management, Journalism, Politics and Governance, Sociology, Urban and Regional Planning

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Pages 89-120

8.4.2 Report #F2019-2 of the Academic Governance and Policy Committee (AGPC): M. Benarroch

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8.4.2.1. Provost's Update

Pages 91-93

8.4.2.2. Revisions to Senate Policy 2: Undergraduate Curriculum Structure - K. MacKay

Motion: *That Senate approve the revisions to Senate Policy 2: Undergraduate Curriculum Structure*

Pages 94-106

8.4.2.3. Revised Graduate Program Council Bylaws for the PhD in Policy Studies program – C. Searcy

Motion: *That Senate approve the revised Graduate Program Council Bylaws for the PhD in Policy Studies program*

Pages 107-111

8.4.2.4. Faculty of Law Council Bylaws – A. Saloojee

Motion: *That Senate approve the Faculty of Law Council Bylaws*

Pages 112-120 8.4.2.5. Modifications to Ryerson's examination and grading timelines – C. Hack

Motion: *That Senate approve the modifications to Ryerson's examination and grading timelines*

Pages 121-135 8.4.3 Report #F2019-1 of the Scholarly, Research and Creative Activity Committee (SRCAC) – S. Liss

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Pages 124-135 8.4.3.1. 2019-2024 Strategic Research Plan: Discussion and Notice of Motion

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Pages 136-318 8.4.4 Report #F2019-1 of the Yeates School of Graduate Studies Council (YSGS Council) – C. Searcy

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Pages 137-318 8.4.4.1. New Program for the PhD in Management

Motion: *That Senate approve the new program for the PhD in Management*

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9. Old Business

10. New Business as Circulated

11. Members' Business

12. Consent Agenda (for information only):

    12.1 Progress Indicators – 2019
    https://www.ryerson.ca/senate/senate-meetings/agenda/2019/Progress_Indicators_November_5_2019.pdf

    12.2 Calendar Change forms:
    https://www.ryerson.ca/senate/senate-meetings/agenda/2019/Calendar_Change_Forms_November_5_2019.pdf

    - Faculty of Arts: Economics; Geography and Environmental Studies
    - Faculty of Communication & Design: Creative Industries
    - Ted Rogers School of Management: Accounting & Finance; Business Management – Entrepreneurship & Strategy

13. Adjournment

SENATE MINUTES OF MEETING

Tuesday, October 1, 2019

THE REAL INSTITUTE – 424 Yonge Street, 2nd Floor

MEMBERS PRESENT:			
EX-OFFICIO:	**FACULTY:**		**STUDENTS:**
F. Anger	R. Adams	E. Ignagni	M. Arif
D. Cramb	D. Androutsos	C. Kular	S. Donato-Woodger
G. Craney	R. Babin	L. Lavallée	H. Elsayed
C. Falzon	A. Bailey	A. McWilliams	O. Karp
L. Fang	S. Benvie	P. Moore	J. Kewal
C. Hack	C. Bradish	J. Neil	M. Moghaddas
M. Lachemi	T. Burke	R. Noble	K. Nguyen
K. MacKay	D. Checkland	S. Rakhmayil	K. Park
J. McMillen	K. Dermody	H. Rollwagen	V. Prevost
D. O'Neil Green	M. Dionne	S. Sabatinos	D. Salman
A. Saloojee	A. El-Rabbany	J. Tiessen	H. Shahid
C. Searcy	A. Ferworn	M. Tiessen	J. Spagnuolo
P. Sugiman	N. George	M. Vahabi	
S. Zolfaghari	M. Green	N. Walton	
	R. Hudyma	A. Yazdani	
			EX-OFFICIO STUDENTS:
			N. Brayiannis

SENATE ASSOCIATES:	**ALUMNI:**
A. M. Brinsmead	N. Di Cuia
M. Zouri	S. Rattan
J. Dallaire	
R. Kucheran	

REGRETS:	**ABSENT:**
K. Agyemang	D. Bitondo
L. Barnoff	K. Kumar
M. Benarroch	R. Meldrum
D. Brown	
S. Liss	
A. Miransky	
I. Mishkel	
C. Shepstone	
D. Taras	

Presentation Summary – SMA3: An Overview
Committee of the Whole Discussion – Glenn Craney

The Deputy Provost and Vice Provost, University Planning presented an overview of the Strategic Mandate Agreement 2020-2025, also known as SMA3, which is in the process of being developed and negotiated in response to a September 2019 directive from the Ministry of Colleges and Universities. SMA3 will be the successor to Ryerson's current SMA2.

Negotiations will last from October 2019 to March 2020, with one site visit to Ryerson and additional information anticipated from the ministry. A key difference is that there is no new money being allocated to the sector. Instead, a progressively increasing portion of government grant revenue (from 25% and approx. $57 M in 2020-21 to 60% and roughly $140 M by 2024-25) becomes tied to achieving performance metrics. Penalty amounts for not achieving targets are redistributed annually to those institutions that do meet them, on an indicator by indicator basis.

The method the ministry will use to set targets and bands of tolerance (the allowable variation that does not result in financial penalty) was described. The method will be dynamic and incorporate prior year actuals rather than setting annual targets for each SMA3 year at the outset of the process.

Regarding enrolment, the ministry has reconfirmed the Corridor Funding Model and limit on undergraduate enrolment growth funding for five years, and also signaled that it is freezing graduate enrolment at 2019-20 levels. On the other hand, the ministry might potentially relax fundability restrictions in place between the undergraduate, master's, and doctoral level enrolment that it funds.

It was noted that the ministry would use six funding metrics in 2020-21, nine in 2021-22, and ten the following years, and that there were two additional reporting metrics for which institutions would need to post results by March 31, 2021 for which it will provide further information at a later date.

Illustrative information on what is known about the SMA3 funding metrics based on Ryerson data and its understanding of ministry definitions to date was presented. This information also appears on the SMA3 website (www.ryerson.ca/sma2020).

The presentation noted that Ryerson would need to choose a proportion of its enrolment to count toward its institutional strength/focus metric, and enumerated some criteria such as strength of projected enrolment that could be used to find this subset of enrolment. Central to these criteria was building on the areas of strength in the current SMA: Innovation and Entrepreneurship, Design and Technology, Management and Competitiveness, Creative Economy and Culture, and Health and Technology. Ryerson will also need to propose an economic impact metric and three alternatives were suggested: a diversity index, the number of start-ups, and the number of invention disclosures.

Institutions will be able to choose the weight that applies to each funding metric provided it falls within a minimum and maximum set by the ministry. Based on what is known about historical

results and future trends, a risk factors score card for the funding metrics was presented, along with weights based on minimizing risk and a draft set of weights that attempts to incorporate institutional values.

The institutional submission is due to the ministry on December 17, 2019 and next steps after Committee of the Whole include Town Halls and a Chairs, Directors and Deans (CDD) discussion.

Feedback on three questions would be of particular help in framing Ryerson's response to the ministry: (1) What criteria should be used to arrive at Ryerson's institutional strength/focus for SMA3? (2) Which metric should Ryerson adopt as its institution-specific economic impact measure? (3) When assigning weight to metrics, how should we balance internal priorities/values with the need to protect Ryerson's government grant revenue?

The Deputy Provost indicated that ideas, questions and suggestions for SMA3 are welcome, that an email address (sma2020@ryerson.ca) is available for feedback, and that a website (www.ryerson.ca/sma2020) with additional information, including the presentation, has been launched.

Senate Meeting:

1. Call to Order/Establishment of Quorum

2. Land Acknowledgement
   "Toronto is in the 'Dish With One Spoon Territory'. The Dish With One Spoon is a treaty between the Anishinaabe, Mississaugas and Haudenosaunee that bound them to share the territory and protect the land. Subsequent Indigenous Nations and peoples, Europeans and all newcomers have been invited into this treaty in the spirit of peace, friendship and respect."

3. Approval of the Agenda
   Motion: *That Senate approve the agenda for the October 1, 2019 meeting*

   A. McWilliams moved; O. Karp seconded
   Motion approved

4. Announcements

5. Minutes of the Previous Meeting
   Motion: *That Senate approve the minutes of the June 11, 2019 meeting*

   R. Babin moved; T. Burke seconded
   Motion approved

6. Matters Arising from the Minutes - None

7. Correspondence - None

8. Reports

8.1 Report of the President

8.1.1 President's Update

The President Reported:

1) Welcome to the new Senate members and the team involved in finding the new location along with a welcome to the following new people:
   - Kwame Addo, New Ombudsperson.
   - Pedro Barata, Executive Director of the Future Skills Centre
   - Louise Cowin, New Executive Director for Athletics & Recreation
   - Tom Duever, FEAS Dean re-appointed
   - John MacRitchie, Ryerson's Inaugural Assistant Vice-President, Zone Learning and Strategic Initiatives

2) Thank you to Charmaine Hack and her team, and all staff, faculty and students who volunteered over the three days at the University Fair (826 Ryerson people in attendance). Over 120,000 people attended the fair with 30,000 people who attended Ryerson seminars. An increase of 25% over last year.

3) The Law School – government has approved that students will be eligible for OSAP.

4) The Daphne Cockwell Health Sciences Complex is now operational. Beautiful state-of-the-art building which encompasses four departments, study space and classrooms.

5) Ryerson welcomed Toronto International Film Festival (TIFF) last month. There were five Ryerson graduates who debuted their films this year.

6) The Ryerson Pow Pow took place over two days. This the second year for this event at Ryerson.

7) Convocation will take place on October 16th and 17th. There will be three ceremonies.

   Honorary doctorates will be presented to:
   - Maryka Omatsu, former lawyer practicing human rights, environmental and criminal law, and lecturer at Ryerson
   - Sajjad Ebrahim, Entrepreneur in plastics with Par-Pak Toronto, Chairman and CEO of Lark Investments.

8) A number of our executive offices are developing strategic plans. There are also other plans (e.g. Academic Plan; Research Plan, Fundraising Plan, International Plan and the Master Plan). It is important for us to have a unified document - work is ongoing on the Strategic document.

8.2 Communications Report – as presented in the agenda.

8.3 Report of the Secretary

8.3.1 Committee Updates

- Vacancies on committees are being filled.
- There will be a by-election to replace the Faculty of Science student on Senate.

8.4 Committee Reports
8.4.1 Report #F2019-1 of the Academic Standards Committee (ASC): K. MacKay

8.4.1.1. Discontinuation of the Health Information Management program

Motion: *That Senate approve the discontinuation of the Health Information Management program*

K. MacKay moved; J. Tiessen seconded
Motion approved

8.4.1.2. Modifications to the Health Services Management program

Motion: *That Senate approve the Modifications to the Health Services Management Program*

K. McKay moved; J. Tiessen seconded
Motion approved

8.4.1.3. Department of History's new Minor in Middle East and North Africa Studies

Motion: *That Senate approve the Department of History's new Minor in Middle East and North Africa Studies*

K. McKay moved; M. Vahabi seconded
Motion approved

8.4.1.4. School of Hospitality and Tourism and the School of Creative Industries' new Minor in Events and Live Entertainment Management

Motion: *That Senate approve the School of Hospitality and Tourism and the School of Creative Industries' new Minor in Events and Live Entertainment Management*

K. MacKay moved; C. Falzon seconded
Motion approved

8.4.1.5. Grading variations for the Juris Doctor program

Motion: *That Senate approve the grading variations for the Juris Doctor program*

K. MacKay moved; S. Rattan seconded

Comments/Questions*:*

Q: Inquiry about the impacts of government changes and how they want higher retention rates from students.

A: Graduation rates and retention rates for law students are higher than the average programs, so that will be better for us.

C: There will be are supports in place to assist students with meeting their grades.

Q: Inquiry about the "late policy". Three other schools in Canada that do not have a late policy. What kind of measures are in place to ensure that students provide their submissions on time to ensure that they are enrolled?

A: Instructors will assist students in that regard. This will be handled at the course level.

Q: Is the boot camp the same as legal practice program? Boot camp sounds very militaristic.

A: The boot camp does not lead to the LLP program. The Law Society confirmed and approved that students do not have to do articling if they do not want to.

C: President Lachemi said this is a huge advantage for law students. The law school will start in September 2020 and we have allotted space for 150 students.

Q: Query about the gap between domestic students and international regarding tuition fees?

A: For a domestic student it is approximately 21, 168 and for an international student it is 10,000 more.

Motion approved

8.4.1.6. For information: Addendum to the Medical Physics 2-year follow-up report for Periodic Program Review

8.4.2 Report #F2019-1 of the Academic Governance and Policy Committee (AGPC): M. Benarroch

8.4.2.1. Provost's Update

This item was tabled for the next meeting as the Provost was not able to attend this meeting.

8.4.2.2. Removal of Senate Policy 155: Approval of Collaborative Academic Program Agreements - K. MacKay

Motion: *That Senate approve the removal of Senate Policy 155: Approval of Collaborative Academic Program Agreements*

This is due to redundancy as there are other policies (IQAP) which cover this area.

K. MacKay moved; A. McWilliams seconded
Motion approved

9. Old Business

10. New Business as Circulated

11. Members' Business

12. Consent Agenda
President Lachemi referred to a commitment that Ryerson made last year to increase Indigenous faculty. We now have eight new faculty members. He also acknowledged the new Indigenous Senator roles held by: Lynn Lavallée, Indigenous faculty member; and two Senate Associates, Riley Kucheran and Elder Joanne Dallaire.

13. Adjournment
The meeting adjourned at 6: 44 p.m.

Ryerson University
President's Update to Senate
November 5, 2019

APPOINTMENTS

Gary Hepburn has been appointed dean of The G. Raymond Chang School of Continuing Education effective January 1, 2020. As past president of the Canadian Association for University Continuing Education (2017–18), Gary has a wealth of experience and leadership in the field. He joins us from the University of Manitoba, where as dean of the Division of Extended Education, he oversaw non-credit programs. Previously, he was the director of academic programming and delivery at the University of the West Indies' Open Campus, and for 15 years, he was associate professor at Acadia University, where he specialized in educational technology and online education. Gary holds a PhD in curriculum and instruction from the University of British Columbia and an M.Ed from St. Mary's University in Halifax.

CONGRATULATIONS

Marco A. Fiola, professor of Languages, Literatures and Culture, has been named the 2019–20 Ryerson fellow at Massey College at the University of Toronto. He will be provided with space at the college and with resources to pursue his research in translation theory and lexicography-terminology. In addition, *Andrew Millward* professor of Geography and Environmental Studies, and *Deborah de Lange*, professor of Global Management Studies have been named visiting scholars at Massey College for 2019–20.

PARTNERSHIPS

On September 3, the federal government announced a $3-million grant from FedDev Ontario to establish the Niagara Falls-Ryerson Innovation Hub (NFRIH). Ryerson will partner with the City of Niagara Falls—which will match the $3-million in funding over four years—and with Spark Niagara on the hub, for which the DMZ will supply a model and provide resources for designing programming and services. The hub will incubate and accelerate digital media start-ups, and it will create jobs while helping to diversify the local economy and revitalize the city's downtown core.

EVENTS

RYERSON IMAGE CENTRE EXHIBITIONS – On September 11, the Ryerson Image Centre celebrated the launch of three exhibitions. In the Main Gallery and University Gallery, *The Way She Looks: A History of Female Gazes in African Portraiture* is curated by Sandrine Colard (professor of art history at Rutgers University-Newark). It presents photographs from the Walther Collection of photography and lens-based art from Africa for the first time in Canada, showcasing work from the 19th century to the present day. It focuses on the ways women have been represented and have, more recently, taken their place behind the camera, subverting or challenging the "male gaze." On the New Media Wall, *Syrus Marcus Ware: Ancestors, Can You Read Us? (Dispatches from the Future)* finds Ware, a Toronto artist, imagining a future from where racialized activists communicate with their ancestors in the present day. In *Lucy Lu:*

Da Pi Yuan in the Student Gallery, Toronto-based artist Lu explores her Chinese-Canadian identity with archival material from her family and new photographs taken in the apartment complex in Xi'an, China, where she grew up and where her grandparents still live.

TIMBERFEVER – From September 12 to 15, Ryerson held the fifth annual Timberfever competition, in which around 100 architectural science and civil engineering students from Alberta to the Maritimes worked together to build structures out of wood. Presented by Moses Structural Engineers, the competition is designed both to break down barriers between architects, engineers, and builders (with members of Carpenters' Local 27 mentoring the students on using power tools) and to give students experience working with wood—a material whose role in sustainability is making it increasingly popular in buildings. This year was the first when teams were "scrambled" to include students from different universities; each team constructed urban parklets—amenities for retail streets including seating, shade, shelving, and planters. The projects were judged on their design and construction, and they were donated to the public after the judging.

REBUILDING THE PUBLIC SQUARE – On September 13, the Ryerson Leadership Lab launched its flagship research project, Rebuilding the Public Square, which surveyed 3000 Canadians to assess their digital news literacy and its effects on their political engagement, as well as their attitudes towards regulating social media platforms. In findings that were widely reported—including in the *Washington Post*—the project discovered that while many Canadians get news from social media companies, they do not trust them to do what is in the public interest. Three out of four Canadians support requirements for these companies to tackle disinformation and hate speech, while three out of five believe the government should require the companies to address the political issues the spread of such content has created. The Lab has used the findings in partnering with Ryerson's Democratic Engagement Exchange to develop tools to increase digital and civic literacy.

RYERSON POW WOW RETURNS – On September 20 and 21, Saagajiwe, the Indigenous centre for research and creation, hosted a pow wow in the Kerr Hall Quad. Building on this success of last year's pow wow—the first at Ryerson since 2001, held in the Kerr Hall Gym—the event moved outdoors, with the traditional pow wow on the 20th (followed by a screening of the movie *Smoke Signals*) and a vendor market and community social on the 21st. New this year, the pow wow was preceded by an education week, which included a treaty education panel, teachings about sacred medicines, a beading circle at the School of Fashion, and a showcase of deer hide tanning. The pow wow was co-led by Indigenous undergraduate students Amanda Cowell, Social Work; Karly Cywink, RTA School of Media; Josie Slaughter, Creative Industries; and Anthony Warren, Social Work. The pow wow was funded by a $30,000 City of Toronto Indigenous Arts and Culture grant, as well as by the Office of the Provost, in support of a recommendation listed in *Truth and Reconciliation at Ryerson.*

SCIENCE LITERACY WEEK – From September 16 to 22, Ryerson participated in Science Literacy Week, an annual national celebration of science and research. This year's theme was "oceans," and SciXchange hosted events on-campus and beyond, many of which focused on the impact of climate change on the health and biodiversity of the world's oceans. Events included a livestream with the crew of the Nautilus expedition, which is exploring the eastern Pacific Ocean; presentations on pollution in oceans by Ryerson Urban Water, the Biology Course Union, and Ryerson Science Society; a series of science

seminars for seniors co-hosted by the Chang School; an introductory workshop on coding and robotics; an Indigenous science demonstration of hide tanning in the quad (in partnership with Indigenous education week); and Soapbox Science at the Word on the Street festival, where 12 female scientists told festival-goers about their cutting-edge work.

INTERNATIONAL ISSUES DISCUSSION – On September 18, the International Issues Discussion (IID) series, which since 2005 has been inviting experts to discuss hot-button topics, kicked off its 2019–20 season with "Populism: Trump and Europe. Can it Happen Here and What to Do About It?" held in partnership with *Conserve Democracy*. The event featured special guest Jon Allen, a veteran of the foreign service and formerly Canadian ambassador to Spain, who stated that economic inequality must be tackled in order to stave off populism. Subsequent discussions have been "How Fake News Came to Trump Real News in So Many Minds" (October 2, with Suanne Kelman, professor emerita at the School of Journalism) and "When Destiny Calls: Surviving the First Congo War" (October 23, with author and First Congo War survivor Oliver M. Mweneake and journalist Nadia Zaidi).

ORANGE SHIRT DAY – On September 27, the Ryerson community participated in Orange Shirt Day, a nationwide initiative memorializing the devastating impact of the residential school experience. Students, faculty, and staff wore orange shirts, symbolic of the shirt that was taken from survivor Phyllis Webstad on her first day of residential school in Williams Lake, B.C. There were opportunities for education and reflection, including sessions on making buttons, corn husk dolls, and patchwork quilts; a lunch with Indigenous cuisine from Ryerson Eats; a roundtable discussion about truth and reconciliation; and a keynote address by elder Dorothy Peters, coordinator of the Nmakaandijiiwin (Finding my way) program and the Community Health Worker Trainee program at Anishnawbe Health Toronto, who spoke about trauma and resilience. Ryerson's annual Orange Shirt Day event enacts recommendations from students from the Ryerson TRC Community Consultation. It is organized by Aboriginal Student Services.

ONTARIO UNIVERSITIES FAIR – The annual event held September 27 to 29 at the Metro Toronto Convention Centre attracted 120,338 visitors. There were thirty thousand visitors to the Ryerson booth, over 3395 of whom—in an increase of 25% over last year—attended the presentations given by Ryerson recruitment officers. Representatives from each faculty, zone learning, and student affairs were on hand to answer questions about academic programs, student life, and experiential learning opportunities. Our social media impressions increased by 196% over last year, with 550 views per snap on Snapchat and more than 63,684 Instagram story impressions. Also, 13,796 passports were scanned so prospective students could access more information about Ryerson—a 10% increase over last year. Special thanks to the Office of the Registrar for continuing leadership in preparation, coordination, and follow-up; and to the team of 826 faculty, staff, and student volunteers who gave every prospective student the feeling that Ryerson could be their home.

STUDENT TRANSPORTATION STUDY – On October 1, Ryerson, along with nine other colleges and universities in the GTA and Hamilton, launched StudentMoveTO, a ground-breaking study on student transportation. Updating a 2015 study of the same name, which focused on four universities (including Ryerson), this iteration will explore how the 600,000 post-secondary students in the region travel to and from school. As with its predecessor, it will use this information in order to provide insight on potential

policy changes involving areas such as public transportation, parking, and bicycle storage. The study is currently in its first phase: a survey, running until November 15. StudentMoveTO's principal investigator is Raktim Mitra, associate professor at Ryerson's School of Urban and Regional Planning (SURP), and the student project manager is SURP undergraduate student Ryan Taylor.

NATIONAL INSTITUTE ON AGEING DONATION – On October 1, the Slaight Family Foundation announced a $1-million donation to the National Institute on Ageing (NIA) to develop the Slaight Policy Series on Ageing. The series will consist of reports and educational initiatives focusing on four themes: population diversity and ageing; age-friendly communities; financial security and ageing; and abuse, ageism, and social isolation. Drawing from these themes, the series will examine how to help more seniors age in the places of their choice, offering guidance to governments, the health-care sector, and private- and public-sector organizations that work with seniors. The funding to the NIA is part of the $30-million Slaight Family Foundation Seniors Initiative, which also funds organizations that will partner with the NIA over the course of the series, including the Alzheimer Society of Canada, the Canadian Red Cross, Dying with Dignity, and Egale Canada.

100 DEBATES ON THE ENVIRONMENT – On October 3, Ryerson participated in the national effort "100 Debates on the Environment," which organized 107 non-partisan debates across Canada prior to the national election. The Ryerson debate was organized by the Ryerson Leadership Lab and hosted by Visiting Practitioner (and Toronto Star journalist) Martin Regg Cohn. Participating were Brian Chang (Toronto Centre, New Democratic Party of Canada), Annamie Paul (Toronto Centre, Green Party of Canada), and Adam Vaughan (Spadina-Fort York, Liberal Party of Canada), who discussed their policy proposals to address the climate crisis and to build sustainability. In an article in *The Star* the following day ("Canada's two solitudes — environmental and electoral"), Regg Cohn wrote about how "Young, first-time voters dominated the audience. I've covered many raucous all-candidates' debates, but never moderated an encounter quite so passionate — or polite."

DEMOCRACY AND CITIZENSHIP CONFERENCE – On October 5 and 6, the TRSM hosted *Constitutional Democracy Under Stress – A Time For Heroic Citizenship*, a free weekend conference on the state of liberal constitutional democracy. Organized by the civic education initiative Section 1 along with Mosaic Press, the conference showcased 25 speakers including celebrated primatologist and UN Messenger for Peace Jane Goodall (via videoconference), former chief electoral officer of Canada Jean-Pierre Kingsley, Massey College Principal (and former Ontario minister of natural resources) Nathalie Des Rosiers, and secretary-general of the InterAction Council Thomas Axworthy. The speakers participated in panels such as "Setting the Table – The Gold Standard and the Retreat of Liberal Democracy," "Data and Democratic Decision-Making," and "Some Advice for Twenty-First Century Democracies."

FALL CONVOCATION 2019 (*2018 figures*) – From October 16 to 17, three ceremonies celebrated the achievement of 2,167 (2,189) graduates eligible to cross the stage, awarding 1000 (982) undergraduate degrees and certificates, 744 (772) graduate degrees and certificates, and 423 (435) continuing education certificates. Thanks and appreciation are extended to members of the Board of Governors and Senate—in particular the Senate Awards and Ceremonials Committee, deans, speakers, nominators, 110 volunteers and 250 faculty members who participated, and everyone who contributed to making convocation very special for students and families.

***from the* President's Calendar**

Sep 5, 2019: Conservative Party deputy leader Lisa Raitt toured the Centre for Urban Innovation; I greeted her and spoke with her about Ryerson's contributions to society.

Sep 5, 2019: Along with Chair of the Board Mitch Frazer, I hosted a Board social, which included attending the TIFF premiere of the Canadian film *Clifton Hill* at the Ryerson Theatre.

Sep 6, 2019: I was interviewed by Toronto Star journalist Kristin Rushowy about the Ontario government's approval of the Law School, for the feature article "Ryerson's law school gets some provincial support, students now eligible for OSAP."

Sep 9, 2019: I participated in a regular meeting of the executive committee of the Council of Ontario Universities (COU).

Sep 10, 2019: I was delighted to deliver remarks at the VIP opening reception for the Ryerson Image Centre's fall exhibitions, and to welcome to campus Artur Walther, whose world-renowned collection of African photography is the source for the exhibition *The Way She Looks: A History of Female Gazes in African Portraiture.*

Sep 12, 2019: In Ottawa, I attended a joint research and international committee meeting of Universities Canada. Representatives of government agencies were in attendance to discuss issues such as how relations between countries are influencing the university sector, including research and institutions' ability to attract international students.

Sep 13, 2019: Along with Provost and Vice-President, Academic Michael Benarroch, I met with the international and domestic undergraduate recruitment teams, as part of the training schedule that prepares recruiters to visit more than 1500 schools across Canada and beyond this fall.

Sep 13, 2019: I attended a Campus Master Plan Update Pop-Up, at which work on the Master Plan thus far was shared with members of the Ryerson community, who provided feedback.

Sep 13, 2019: Along with Karim Bardeesy, executive director of the Ryerson Leadership Lab, I met with Matthew Mendelsohn, deputy secretary to the cabinet (results and delivery) in the Privy Council Office of Canada, to introduce him to the Ryerson ecosystem.

Sep 17, 2019: As part of a dinner meeting organized by the Ontario Chamber of Commerce, I met with Binali Yildirim, former prime minister of Turkey, who was being introduced to leaders in various sectors in Toronto.

Sep 19, 2019: I met with Irvin Studin, president of the Institute for 21st Century Questions, to discuss Ryerson's interests in the institute's work.

Sep 19, 2019: I delivered welcome remarks at the Centre for Engineering Innovation and Entrepreneurship's event An Afternoon with Michael Serbinis. Serbinis, an engineer, entrepreneur, and angel investor, is the founder and former CEO of Kobo and now the CEO of health and wellness platform League.

Sep 20, 2019: I was delighted to attend the pow wow in the Kerr Hall quad, Ryerson's second in two years after a 17-year hiatus.

Sep 24, 2019: I attended a workshop on the Campus Master Plan hosted by Facilities Management and Development.

Sep 24, 2019: I was happy to give remarks to welcome Martin Chalfie, university professor at Columbia University and 2008 Nobel Prize laureate in chemistry, to campus at a reception hosted by the Faculty of Science.

Sep 24, 2019: I met with Asima Vezina, president and vice-chancellor of Algoma University, as part of an ongoing discussion about future collaboration between our universities on programming.

Sep. 24, 2019: I was pleased to give remarks welcoming students, parents, faculty, and staff to the official opening of Hillel Ryerson's new space at 415 Yonge Street.

Sep 25, 2019: Along with President Vezina, I met with Ross Romano, Ontario's minister of training, colleges and universities, to discuss ideas for collaboration.

Sep 25, 2019: I met with Visiting Practitioner Martin Regg Cohn for an update on his involvement with Ryerson.

Sep 25, 2019: I spoke with Edward Rogers, chair of Rogers Communications, about the ongoing partnership between Rogers and Ryerson.

Sep 25, 2019: I attended a regular meeting of the COU, followed by a meeting of COU executive heads.

Sep 25, 2019: I attended a reception for Ontario's Universities Summit with Ontario cabinet ministers Ross Romano (Training, Colleges and Universities) and Rod Phillips (Finance), as well as Peter Bethlenfalvy (president of the Treasury Board Secretariat of Ontario).

Sep 26, 2019: I attended Ontario's Universities Summit, where I introduced the session Understanding Public Opinion, at which representatives from Ipsos shared findings from public opinion polling and an internal survey of COU members. A discussion about opportunities for advocacy for provincial budgets followed.

Sep 26–27, 2019: In Ottawa, I attended a reception and dinner for a regular meeting of the NRC council, followed by the meeting itself the next day.

Sep 28, 2019: I was proud to attend the Ryerson booth at the Ontario Universities Fair to support our committed volunteers.

Sep 30, 2019: Along with Vice-Provost, Academic Kelly MacKay, I met with Meghan Moore, CEO of charitable organization the Loran Scholars Foundation, which gives scholarships to students entering university. We discussed collaboration with Ryerson on programming and the possibility of our hosting some of their events.

Oct 1, 2019: Along with Assistant Vice-President, University Relations Jennifer Grass, I greeted The Honourable Prabmeet Sarkaria, Ontario's associate minister of small business and red tape reduction, who was at Ryerson for the DisGovr GovTech Summit 2019.

Oct 1, 2019: I met with Andy Pringle, chair of the Toronto Police Services Board, to discuss Ryerson's Campus Master Plan.

Oct 1, 2019: I attended the Ryerson Democracy Forum event *Election 2019 - Behind the battle for your ballot*, which was hosted by Jarislowsky Democracy Chair Sanjay Ruparelia.

Oct 2, 2019: I was pleased to attend the annual welcome party for the Tri-Mentoring Program, which supports Ryerson's culturally diverse students in their pursuit of academic, personal, and career goals.

Oct 2, 2019: I met with Sofiane Belgadi, founder and CEO of the Lozard Group, an all-in-one service for startups, to discuss the innovation ecosystem at Ryerson.

Oct 2, 2019: I met with journalist and editor Diane Francis, formerly a distinguished visitor at TRSM, for an update on her activities.

Oct 3, 2019: I was pleased to deliver remarks at the annual conference for Ryerson's Management and Confidential employee group (MAC), and to share some thoughts on recent developments at Ryerson and on our outlook for the exciting months ahead.

Oct 3, 2019: I welcomed Caroline Mulroney, Ontario's Minister of Transportation and Minister Responsible for Francophone Affairs, to campus, where she spoke as part of the School of Business Management's Regulation, Government and Socially Responsible Management lecture series.

Oct 3, 2019: Along with Jennifer Grass, I met with Chris Eby, executive vice-president of PSP Investment (the Public Sector Pension Investment Board) to discuss collaboration with Ryerson on the redevelopment of Downsview Park.

Oct 4: Along with Deborah Brown, vice-president, administration and operations and Ian Mishkel, vice-president, university advancement and alumni relations, I spoke with Cadillac Fairview's president and CEO, John Sullivan, continuing our discussion about the Campus Master Plan.

Oct 5, 2019: I was proud to give remarks welcoming prospective students to Ryerson's law school's very first open house, sharing with them our vision of the school as a leader in experiential education, entrepreneurship, and innovation.

Oct 7, 2019: Along with Ian Mishkel and Steven Liss, vice-president research and innovation, I met with Kevin Smith, president and chief executive officer and Brian Hodges, chief medical officer and executive vice-president, education of the University Health Network, to discuss potential collaboration between the network and Ryerson.

Oct 8, 2019: I attended the opening of the annual user conference for business-mobility and internet of things company SOTI (Soft Object Technologies Incorporated), SOTI SYNC 2019.

Oct 8, 2019: I was pleased to deliver remarks celebrating the opening of the Schneider Electric Smart Grid Lab's new space in Ryerson's Centre for Urban Innovation, which was attended by the Honourable Bill Walker, Ontario's Minister of Energy. At the event, I spoke with Schneider Electric Canada's president, Susan Uthayakumar, about expanding Ryerson's collaboration with Schneider into other areas.

Oct 8, 2019: At the SLC Amphitheatre, I was delighted to host Ryerson's annual Thanksgiving lunch for students.

Oct 8, 2019: Along with Ian Mishkel, I met with Ryerson Chancellor Emeritus John Craig Eaton II, to discuss the Campus Master Plan and give him an update about the Law School.

Oct 8, 2019: I dropped by Ryerson's on-campus polling station at the Student Campus Centre to encourage students to vote in the federal election.

September 2019

Media Relations

- President Lachemi was featured in Toronto Star article on Ryerson Law receiving OSAP eligibility.
- New Athletics Director Louise Cowin was featured in Toronto Star exclusive, *"Ryerson athletic director Louise Cowin hopes to take the IOUs out of U Sports for student-athletes"*
- Launch of collaborative student transit research project, StudentDwellTO, was covered by over 25 outlets including The National Post, CBC, Toronto Sun and GlobalNews.
- Ryerson Law School Interim Dean Anver Saloojee was featured in Precedent Magazine article, *"Ryerson University wants to change legal education forever"*
- Compiled and distributed a collection of faculty experts available for comment on federal election topics including blackface controversy, election debate, voter engagement. Over 20 election related stories placed.

Publications

- Produced 12 editions of Ryerson Today (RT)
- 65,252 subscribers
- Highest open rate was the edition featuring message from the Provost on Day of Action for Climate Change (45.6 per cent)
- Second-highest open rate was the first person employee experience of Get Out. Hide. Fight. Training (42.4) Note: industry average is 16.1 per cent
- Special edition on Ryerson Law School ran on Sept. 13

Marketing

- Launched the first digital FCS Year in Review. UR managed the content strategy, user experience and design. A small print piece will complement the digital version and drive audiences to the website.
- Worked with UAR to produce a new booklet (more than 30,000 copies) for the Ontario Universities' Fair that complemented the Admissions Handbook. It was distributed to prospective students at the annual OUF event, which had a turnout of approximately 130,000.
- Continued to develop recruitment materials for Phase 2 of the Faculty of Law campaign, including promotional pieces and event materials for the October 5 Ryerson Law Open House (posters, postcards, digital ads, etc.).
- Led Ryerson's sponsorship of the Toronto Region Board of Trade's Smart Cities Summit (September 25). Extended the sponsorship reach with a week-long digital campaign which included teaser video and paid posts on Facebook, Twitter and Instagram.
- Refreshed the Design Fabrication Zone visual identity which was reflected in the new DFZ website, social media assets, and marketing materials.

- Worked with FCAD and an external photographer to build out their existing photography library. Includes imagery of the new Creative Technologies Lab.

Website

- Year over year saw a 16.4% increase in visits, 18.8% increase in visitors, and a 13% increase in pages viewed.

Social Media

- **Instagram:** Gained 1.6K followers to reach 27.2K. Our highest performing Instagram post to date was posted in September, a gallery of TIFF celebs spotted on campus which had 3.7K engagements.
- **Facebook:** Gained 726 page followers to reach 76K. Experienced a 20% increase in engagements.
- **Twitter:** Gained 346 followers to reach 56.4K. Engagements increased by 27%.
- **LinkedIn:** Gained 2,584 followers to reach 227,500. Generated 2.1K social engagements (likes, comments, shares) and our content had 346K impressions.
- **Giphy:** 632K views of gifs and stickers

Digital Marketing

- Planned and managed digital campaigns for Alumni (event promo for OUT at the Broadview 2SLGBTQ+ social event) and UR (smart cities content amplification to tie into our involvement in the TRBOT Smart Cities Summit).
- Working with agency partners on digital campaigns for Grad Studies (domestic recruitment) Law (domestic recruitment) and MBA (domestic recruitment).

Video Production

- Produced 6 videos, including a “commercial” style video about Ryerson’s 10 zones and Smart cities of the future video.
- The opening of Daphne Cockwell Health Sciences Complex video yielded the highest engagement level of 2.2K and 20.5K views.
- Video about Ryerson’s Library reached total 7.4K views and 1.0K engagements (reactions, comments, shares).
- Back to school video reached 7.9K views with 1.3K engagements.
- Ryerson’s Guinness World Record challenge video gained 12.2K views and a total of 1.5K engagements across all social media platforms.

REPORT OF ACADEMIC STANDARDS COMMITTEE
Report #F2019–2; November 05 2019

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

- **FACULTY OF ENGINEERING AND ARCHITECTURAL SCIENCE – Modifications to the Architectural Science program**
- **FACULTY OF ENGINEERING AND ARCHITECTURAL SCIENCE – New Software Engineering Option in Computer Engineering**
- **FACULTY OF SCIENCE – Modifications to the Mathematics and its Applications program**
- **FACULTY OF ARTS – New Double Majors in Politics and Governance-Criminology; Politics and Governance-History; Politics and Governance-Sociology; Criminology-History; Criminology-Sociology; History-Sociology**
- **FACULTY OF COMMUNITY SERVICES - Modifications to the Collaborative Nursing program**
- **LIBERAL STUDIES – New course proposals**
- ***For Information*: Periodic Program Review 1-yr Follow-up Reports**
    - **Graphic Communications Management**
    - **Journalism**
    - **Politics and Governance**
    - **Sociology**
    - **Urban and Regional Planning**

A. FACULTY OF ENGINEERING AND ARCHITECTURAL SCIENCE – Modifications to the Architectural Science program

The Bachelor of Architectural Science program proposes three changes to the curriculum, effective Fall 2020, as described below.

1. **Renumber 4th year studio courses** – Currently, students in the 4th year Architecture (ARC) option are required to complete two option studios, numbered ARC720 (fall term) and ARC820 (winter term). These option studios both have the same generic course description. Several sections of each studio course are offered each term (typically 5 sections) and they vary from one another in focus.
This proposal responds to problems with students who do not take studios in the typical order. It also facilitates spring/summer term studios and better accommodates students who may fail a studio or travel on an exchange.

It is proposed to remove ARC720 and ARC820 and create one Architecture Option Studio number - ARC920 with several different "Topics" as necessary. Students will be required to complete two sections of this studio in different terms to graduate (each with a different Topic). Thus, there is no change to the number of courses required for graduation, only a different numbering system that allows students more flexibility and for the department to offer sections of ARC920 in fall, winter and spring/summer. This approach is similar to the system used for selected topics courses. The new course description is below:

ARC 920 – Architecture Option Studio
Option Studios are offered each term, per demand, availability and faculty interest. (Examples of typical themes include: housing, urban design, sustainable design, competitions, technology, etc). Students in ARC Concentration must complete two sections of this studio in different terms and different Topics.
Weekly Contact: Lab: 9 hrs.
GPA Weight: 3.00
Course Count: 1.00
Billing Units: 2
Prerequisite: All third year required courses

2. Collaborative Exercise - To complete the BArchSci program each student is required to complete four "Collaborative Exercise" courses (ASC205, ASC405, ASC605 and ASC805) throughout the program, typically once per year. Each course is organised as a vertically integrated, one-week, all-school event held in the first week of winter term.

In recent years the department has had various discussions about this activity and its strengths and weaknesses. A recent survey of students suggested general support for the principles of the Collaborative Exercise, but students

want to see smaller teams, smaller projects, more experiential focus, and questioned the value of having to participate four times throughout the program.

In response, this proposal is to change the program requirements, such that each student is required to complete the Collaborative Exercise twice in order to graduate, once in their first two years in the BArchSci program and once in their final two years in the program. Students will complete ASC205 in year 1 or 2, and ASC605 in year 3 or 4. ASC 405 and ASC 805 will be removed from the calendar, thereby reducing the number of courses required to complete the program from 46 to 44. The new course calendar descriptions will be changed as follows:

ASC 205 Collaborative Exercise I
This is the first of two connected courses (ASC205 and ASC605). Each year the department organises an all-school intensive design charrette. The subject of this changes each year to be topical to the entire program & relate to some currently relevant issue with architectural science implications. Students are placed in vertically integrated teams composed of students from all levels of the program. Each student must complete ASC205 in year one or year two of the program.
This course is graded on a pass/fail basis.
Weekly Contact: Lab:3 hrs.
GPA Weight: 1.00
Course Count: 1.00
Billing Units: 1
Note: This course will be a prerequisite for ASC520, to ensure it has to be completed before the student enters 3rd year.

ASC 605 Collaborative Exercise II
This is the second of two connected courses (ASC205 and ASC605). Each year the department organises an all-school intensive design charrette. The subject of this changes each year to be topical to the entire program & relate to some currently relevant issue with architectural science implications. Students are placed in vertically integrated teams composed of students from all levels of the program. Each student must complete ASC605 in year three or year four of the program.
This course is graded on a pass/fail basis.
Weekly Contact: Lab:3 hrs.
GPA Weight: 1.00
Course Count: 1.00
Billing Units: 1
Prerequisite: ASC205

The number of places in each course will be set to accommodate approximately half of each year's cohort, allowing students to complete ASC 205 and ASC 605 in either their first or second year, and third or fourth year respectively. The department will establish a sign up for students to opt to take this course in the current year or the following year with a limited number of places for each year group. Thus 50% of students in 1st year can sign up for the current year, and 50% for the following year, etc. The department will organise a process to allow students some choice for which year they wish to participate (year 1 or 2, and year 3 or 4).

The two courses ASC405 and ASC805 will be offered for the next 3 years while current students completed the existing program. This means that the total numbers taking all the collaborative courses will gradually decrease by about half of a year intake each year. The table below shows the number of students that are expected to participate each year for the next 5 years.

Year	**ASC205**	**ASC405**	**ASC605**	**ASC805**	**Total # of students**
2019/20	*120[a]*	*110[a]*	*105[a]*	*105[a]*	440
2020/21	60[b]	*110[a]*	*105[a]*	*105[a]*	380
2021/22	60[b] + 55[b]	Not offered	*105[a]*	*105*	325
2022/23	60[b] + 55[b]	Not offered	53[b]	*105[a]*	273
2023/24	60[b] + 55[b]	Not offered	53[b] + 53[b]	Not offered	221

Note: figures in italics are students who are meeting the old requirement of completing all 4 courses.
The numbers reflect student attrition in the program from first to second year and second to third year.
[a] - represents the full cohort for that year.

[b] - represents 50% of the cohort for that year.

3. Concentrations – The department proposes to replace the current 4th year "Options" with "Concentrations", as set out in Ryerson Policy 2. Three Concentrations are proposed:

- Architecture
- Building Science
- Project Management

The current fourth year of the Bachelor of Architectural Science (B.Arch.Sc.) in the Department of Architectural Science requires students to choose one of three "options": Architecture (ARC), Building Science (BSC), or Project Management (PMT). The option is not reflected in their final degree or transcript. Furthermore, students are limited in selecting individual courses based on their interests and desired career intentions. Integration across the options has been highlighted as a goal through the recent PPR process. Concentrations provide an opportunity to choose the undeclared route to complete the B.Arch.Sc program.

To complete the 4th year requirements of the BArchSc program, all students will need to complete:

- Two studio courses from Table 2
- Six professional elective courses from Table 3
- Two Table B - Upper Level Liberal Studies courses
- ASC 605 – Collaborative Exercise II (can be completed in 3rd or 4th year – see section 2 for Collaborative Exercise curriculum change proposal)

If students do not wish to pursue a Concentration, they can choose any 2 studios (one per term), and any six Professional or Professionally-Related Electives. In addition, they will complete two Table B Upper Liberal Studies Courses and the Collaborative Exercise II (ASC605) in year 3 or year 4.

To complete a Concentration, students will still complete the same number of studios and courses, as follows:

To complete the **ARCHITECTURE** (ARC) concentration students must complete:

- Two ARC920 studios – different sections with differing Topics (From Table 2)
- ARC721 and ARC821 From Table 3 (as previously approved in 2019 curriculum amendment – see Appendix IV)
- Two professional elective courses with ASC code from Table 3

In addition, to complete the general program requirements students will need to complete:

- Two other professional electives from Table 3
- Two Table B - Upper Level Liberal Studies courses.
- ASC 605 – Collaborative Exercise II (in year 3 or year 4)

To complete the **BUILDING SCIENCE** concentration students must complete:

- BSC720 and BSC820 (From Table 2)
- BSC721, BSC722, BSC821, BSC822 (From Table 3)

In addition, to complete the general program requirements students will need to complete:

- Two professional electives from Table 3
- Two Table B - Upper Level Liberal Studies courses.
- ASC 605 – Collaborative Exercise II (in year 3 or year 4)

To complete the **PROJECT MANAGEMENT** concentration students must complete

- PMT720 and PMT820 (From Table 2)
- PMT721, PMT722, PMT821, PMT822 (From Table 3)

In addition, to complete the general program requirements students will need to complete:

- Two professional electives from Table 3
- Two Table B - Upper Level Liberal Studies courses.
- ASC 605 – Collaborative Exercise II (in year 3 or year 4)

Current curriculum

First Year

Fall Semester (1st)		**Hrs**	**Winter Semester (2nd)**		**Hrs**
ACS104	Ideas that Shape the World	3	ASC200	Sustainable Practices	3
ASC101	Communications Studio	9	ASC201	Design Studio I	9
ASC102	The Built World	3	ASC202	The Building Project	3
ASC103	The Built Context	3	ASC203	Structures I	3
PCS107	The Natural Context	3	ASC205	Collaborative Exercise I	3
LibStud	One of ENG 101/104/112/201/203/204/212	3	ASC206	Ideas, Tech and Precedents I	3

Second Year

Fall Semester (3rd)		**Hrs**	**Winter Semester (4th)**		**Hrs**
ASC301	Design Studio II	9	ASC401	Design Studio III	9
ASC302	Envelope Systems	3	ASC402	Bodily Comfort Systems	3
ASC303	Structures II	3	ASC403	Site Development and Planning	3
ASC304	The Construction Project	3	ASC405	Collaborative Exercise II	3
ASC306	Ideas, Tech and Precedents II	3	ASC406	Ideas, Tech and Precedents III	3
LibStud	One from Table A	3	CVL407	Structures III	3

Third Year

Fall Semester (5th)		**Hrs**	**Winter Semester (6th)**		**Hrs**
ASC520	Integration Studio I	9	ASC620	Integration Studio II	9
ASC621	Tectonics and Materiality	3	ASC605	Collaborative Exercise III	3
ASC522	Project Economics I	3	ASC521	Light/Sound in Architecture	3
PLX599	The Human World	3	ASC622	Documentation: The Construction Contract	3
LibStud	One from Table A	3	ASC623	Principles of Detailing	3
			LibStud	One from Table B	3

Fourth Year

Architecture Option					
	Fall Semester (7th)	**Hrs**		**Winter Semester (8th)**	**Hrs**
ARC720	Architecture Studio	9	ARC820	Architecture Studio	9
ARC721	Theorizing Technology*	3	ARC821	Architect in Society*	3
Prof-Rel	Two from Table 3	3+3	ASC805	Collaborative Exercise IV	3+3
LibStud	One from Table B	3	Prof-Rel	Two from Table 3	3
			LibStud	One from Table B	3
Building Science Option					
BSC 720	Building Science Studio I (all 3r yr. courses)	9	BSC 820	Building Science Studio II	9
BSC 721	Theory/Performance I: Exis. Buildings (ASC 620)	3	ASC 805	Collaborative Exercise IV	3
BSC 722	Sustainable Control Systems (ASC 620)	3	BSC 821	Theory/Performance II	3
Prof-Rel	One from Table 3	3	BSC 822	Advanced Envelopes/Components	3
LibStud	One from Table B	3	Prof-Rel	One from Table 3	3
			LibStud	One from Table B	3
Project Management Option					

PMT720	Project Management Studio I	9	PMT820	Project Management Studio II	9
PMT721	Economics for Project Management	3	ASC805	Collaborative Exercise IV	3
PMT722	Information Systems	3	PMT821	Construction Practices and Management	3
Prof-Rel	One from Table 3	3	PMT822	Procurement and Const Management	3
LibStud	One from Table B	3	Prof-Rel	One from Table 3	3
			LibStud	One from Table B	3

*Note, these two courses were approved as a curriculum change in 2019

Proposed New Curriculum

First Year

Fall Semester (1st)		**Hrs**	**Winter Semester (2nd)**		**Hrs**
ACS104	Ideas that Shape the World	3	ASC200	Sustainable Practices	3
ASC101	Communications Studio	9	ASC201	Design Studio I	9
ASC102	The Built World	3	ASC202	The Building Project	3
ASC103	The Built Context	3	ASC203	Structures I	3
PCS107	The Natural Context	3	ASC205	Collaborative Exercise I (taken in semester 2 or 4)	3
LibStud	One of ENG 101/104/112/201/203/204/212	3	ASC206	Ideas, Tech and Precedents I	3

Second Year

Fall Semester (3rd)		**Hrs**	**Winter Semester (4th)**		**Hrs**
ASC301	Design Studio II	9	ASC401	Design Studio III	9
ASC302	Envelope Systems	3	ASC402	Bodily Comfort Systems	3
ASC303	Structures II	3	ASC403	Site Development and Planning	3
ASC304	The Construction Project	3	ASC406	Ideas, Tech and Precedents III	3
ASC306	Ideas, Tech and Precedents II	3	CVL407	Structures III	3
LibStud	One from Table A	3	ASC205	Collaborative Exercise I (taken in semester 2 or 4)	3

Third Year

Fall Semester (5th)		**Hrs**	**Winter Semester (6th)**		**Hrs**
ASC520	Integration Studio I	9	ASC620	Integration Studio II	9
ASC621	Tectonics and Materiality	3	ASC521	Light/Sound in Architecture	3
AS522	Project Economics I	3	ASC622	Documentation: The Construction Contract	3
PLX599	The Human World	3	ASC623	Principles of Detailing	3
LibStud	One from Table A	3	LibStud	One from Table B	3
			ASC605	Collaborative Exercise II (taken in semester 6 or 8)	3

Fourth Year

	Fall Semester (7th)			**Winter Semester (8th)**	
Studio	One studio from Table 2	9	Studio	One studio from Table 2	9
Prof-Rel	Three from Table 3	3x3	Prof-Rel	Three from Table 3	3x3
LibStud	One from Table B	3	LibStud	One from Table B	3
			ASC605	Collaborative Exercise II (taken in semester 6 or 8)	3

Architecture Concentration					
	Fall Semester (7th)	**Hrs**		**Winter Semester (8th)**	**Hrs**
Studio	Architecture Studio ARC 920	9	Studio	Architecture Studio ARC 920	9

ARC721	Theorizing Technology*	3	ARC821	Architect in Society*	3
Prof-Rel	One from Table 3 with ASC code	3	Prof-Rel	One from Table 3 with ASC code	3
Prof-Rel	One from Table 3	3	Prof-Rel	Two from Table 3	3
LibStud	One from Table B	3	ASC605	Collaborative Exercise II (taken in semester 6 or 8)	3
			LibStud	One from Table B	3
Building Science Concentration					
BSC720	Building Science Studio: Building Investigation	9	BSC820	Building Science Studio: Investigating Details	9
BSC721	Theory/Performance: Existing Buildings	3	BSC821	Theory/Performance: Sustainable Detail Design	3
BSC722	Sustainable Control Systems	3	BSC822	Advanced Envelopes/Components	3
Prof-Rel	One from Table 3	3	Prof-Rel	One from Table 3	3
LibStud	One from Table B	3	ASC605	Collaborative Exercise II (taken in semester 6 or 8)	3
			LibStud	One from Table B	3
Project Management Concentration					
PMT720	Project Management Studio: Development Process	9	PMT820	Project Management Studio: Procurement	9
PMT721	Economics for Project Management	3	PMT821	Construction Practices and Management	3
PMT722	Information Systems	3	PMT822	Procurement and Const Management	3
Prof-Rel	One from Table 3	3	Prof-Rel	One from Table 3	3
LibStud	One from Table B	3	ASC605	Collaborative Exercise II (taken in semester 6 or 8)	3
			LibStud	One from Table B	3

*Note, these two courses were approved as a curriculum change in 2019

Delivery Plan - Students must declare a Concentration in the Winter term of 3rd year. The department will hold an information session about Concentrations in the fall term of 3rd year and students will be advised of their choices. They will then indicate whether they wish to pursue a Concentration. This process will be the responsibility of the Associate Chair for Curriculum, and the DAS administrative office will keep records of student declarations, progress, etc.

The required courses to complete these concentrations have been offered on an annual basis for many years, and will continue to be offered in this way. ARC721 and ARC821, which were approved in 2019 for introduction into the ARC curriculum as required courses, will be offered in the same manner. Courses will be scheduled to enable all concentrations to be offered annually. Resource needs are not expected to change.

Recommendation
Having satisfied itself of the merit of this proposal, the Academic Standards Committee recommends: *that Senate approve the modifications to the Architectural Science program.*

B. FACULTY OF ENGINEERING AND ARCHITECTURAL SCIENCE – New Software Engineering Option in Computer Engineering

The Computer Engineering Program is proposing a new option[1] in Software Engineering, effective Fall 2020, that meet the curriculum requirements of the Association for Computing Machinery (ACM) and the Institute of Electrical and Electronics Engineers (IEEE). In particular, seven new courses will be introduced. Four courses will

[1] Senate Policy 2 provides for deviations from the defined undergraduate curricular elements, in exceptional circumstances and without prejudice, in order to meet the standards of professional accreditation.

focus on the core concepts of software engineering including *Software Project Management, Software Requirement Specification and Analysis, Software Design and Architecture,* and *Software Testing and Quality Assurance;* three new software-oriented courses in database systems, advanced algorithm design, and distributed and cloud computing will further enhance student knowledge and programming skills. The new courses will also be used to enhance the regular computer engineering curriculum. The curriculum of both the regular computer engineering and the proposed software engineering option both satisfy all Canadian Engineering Accreditation Board (CEAB) accreditation requirements.

Currently, Ryerson offers a software engineering program in an *unaccredited* form as a concentration of the Computer Science program. While this concentration greatly benefits students that do not pursue a professional engineer career path, there is no CEAB accredited software engineering program/option for students who wish to pursue such a career path. This proposed Software Engineering Option within the Computer Engineering Program significantly differs from the Software Engineering Concentration in Computer Science in the following ways:

1. The software training that the Option delivers will be specifically focused on system-level instead of application-level software. This is to address the trend that modern computer systems are including an increasing amount of highly complex software components. The reliable design of these components has become an essential part of today's computer engineering profession.
2. The Option is focused on the training of Computer Engineers to meet the software engineering education requirement as outlined in *IEEE and ACM Curriculum Guidelines for Undergraduate Degree Programs in Software Engineering*. Consequently, both aspects of software engineering and computer engineering education are emphasized.
3. The software training that the Option delivers will also put a great emphasis on designing and implementation software models for the specification and verification of large System-On-Chip (SOC) devices such as CPUs, GPUs, and Field-Programmable Gate Arrays. With the significant increase in the complexity of these hardware devices, there is a significant need in the industry to create large and reliable software models to specify and verify their designs. A significant portion of the curriculum content of our software engineering option will be derived from this aspect of computer engineering.
4. The Option is designed to meet all CEAB accreditation requirements in terms of course content, instructor qualification, course management, and lab delivery and evaluation methods.

As such, this proposed Software Engineering option is synergistic and complementary to the existing software engineering concentration in the Department of Computer Science. It will enhance Ryerson University's strength in Software Engineering by offering a CEAB accredited software program that will focus on system-level aspects of software engineering.

Proposed Curriculum Changes - All students in the computer engineering program will share the same curriculum for the first four semesters. The regular computer engineering will retain the same curriculum as the current computer engineering curriculum with the exception that students will be required to take two of the following three courses – *ELE 635, ELE 639* and the new course on advanced algorithm design – in the 6th semester (instead of taking both *ELE 635* and *ELE 639* in the 6th semester) and the addition of the new course on database systems as a 7th semester elective.

The software engineering option, on the other hand, will replace five required courses (*COE 501 Electric and Magnetic Fields, ELE632 Signals and Systems II, ELE 635 Communication Systems, ELE 639 Control Systems,* and *COE 758 Digital Systems Engineering*) from the 5th, 6th, and 7th semester and two 4th year technical electives by the seven new courses, as follows:

- **Semester 5**: a **new introductory course** (*CPS 510 Database Systems I* from Computer Science) will be introduced **to replace** *COE 501 Electric and Magnetic Fields.* The course is introduced in the 5th semester of the curriculum since it would require *COE 428 Engineering Algorithms and Data Structures* as a prerequisite.
- **Semester 6**: **three new courses**, namely, CPS 688 *Advanced Algorithm Design* (to be developed by Computer Science), a new course on *Software Requirement Specification and Analysis* (*COE 691*), and a new course on *Software Design and Architecture* (*COE 692*). These courses **will replace existing courses**: *ELE632 Signals and Systems II, ELE 635 Communication Systems* and *ELE 639 Control Systems*, thereby increasing the number of software design related courses from two to five.
- **Semester 7**: **a new course** (CPS 714 Software Project Management from Computer Science) will replace COE 758 Digital Systems Engineering (Note: COE 758 will remain a 7th semester technical elective in the software engineering option). The course will be made a co-requisite of COE 700 for students in the software engineering

option since it will be beneficial to the design of EDP projects, which require a substantial amount of group work and hence project management skills.
- Semester 8: two new required courses, Software Testing and Quality Assurance (COE 891) and Distributed and Cloud Computing (COE 892) will be added to the curriculum. The number of technical electives will be reduced from four to two.

Students in software engineering option will register in a similar number of program hours for each semester as students in the current COE program.

New Calendar and New Course Descriptions
The Software Engineering Option will have the following calendar description: The Software Engineering Option concentrates on the design of software systems that are relevant in the engineering of complex computer systems and devices including the design of system-level software, the design of software models for large System-On-Chip Systems, the design of Electronic Design Automation tools, and the design of embedded system software.

CPS510 Database Systems I - Advanced file management techniques involving fundamentals of database organization, design and management. Emphasis is given to Relational Database Management Systems including relational algebra, normal Forms, physical Database Structures and their implementation, and Relational Database Languages. Other types of Database Managers are also discussed such as Hierarchical, Network and Inverted Files.
Weekly Contact Hours: Lecture – 3; Laboratory - 1
Prerequisites: CPS 305 or COE 428; Antirequisites: CPS 616

CPS 688 **Advanced Algorithms -** Algorithms with an engineering emphasis. Topics include algorithms with numbers, divide-and-conquer algorithms, decompositions of graphs, paths in graphs, greedy algorithms, dynamic programming, linear programming and reductions, NP-complete problems, coping with NP-completeness, quantum algorithms.
Weekly Contact Hours: Lecture – 3; Laboratory - 2
Prerequisites: COE 428; Antirequisites: CPS 616

COE 691 **Software Requirements Analysis and Specification -** Introduces students to the requirement definition phase of the software development cycle with an emphasis on the design and implementation of system-level software, large architectural models for System-On-Chip systems, Electronic-Design-Automation tool flows, and embedded systems. Methodologies for the analysis of the system specification, the creation of appropriate description of the desired system behavior and qualities along with relevant constraints and assumptions will be discussed.
Weekly Contact Hours: Lecture – 3; Laboratory - 2
Prerequisites: CPS 510, COE 428, and COE 528

COE 692 **Software Design and Architecture -** Introduces students to issues, techniques, strategies, representations, and patterns used to implement software systems with an emphasis on the design and implementation of system-level software, large architectural models for System-On-Chip systems, Electronic-Design-Automation tool flows, and embedded systems.
Weekly Contact Hours: Lecture – 3; Laboratory - 2
Prerequisites: CPS 510, COE 428, and COE 528

CPS 714 Software Project Management - Introduction to issues involved in managing large, complex software projects. Introduction to industry-standard project management techniques and tools needed to use them, as well as their application to software projects.
Weekly Contact Hours: Lecture – 3; Laboratory - 1
Prerequisites: CPS 406; Antirequisites: ITM 750

COE 891 **Software Testing and Quality Assurance -** Introduces students to various techniques to verify and validate software and software-hardware co-design systems with an emphasis on the design and implementation of system-level software, System-On-Chip systems, Electronic-Design-Automation tool flows, and embedded systems.
Weekly Contact Hours: Lecture – 3; Laboratory - 2
Prerequisites: COE 692

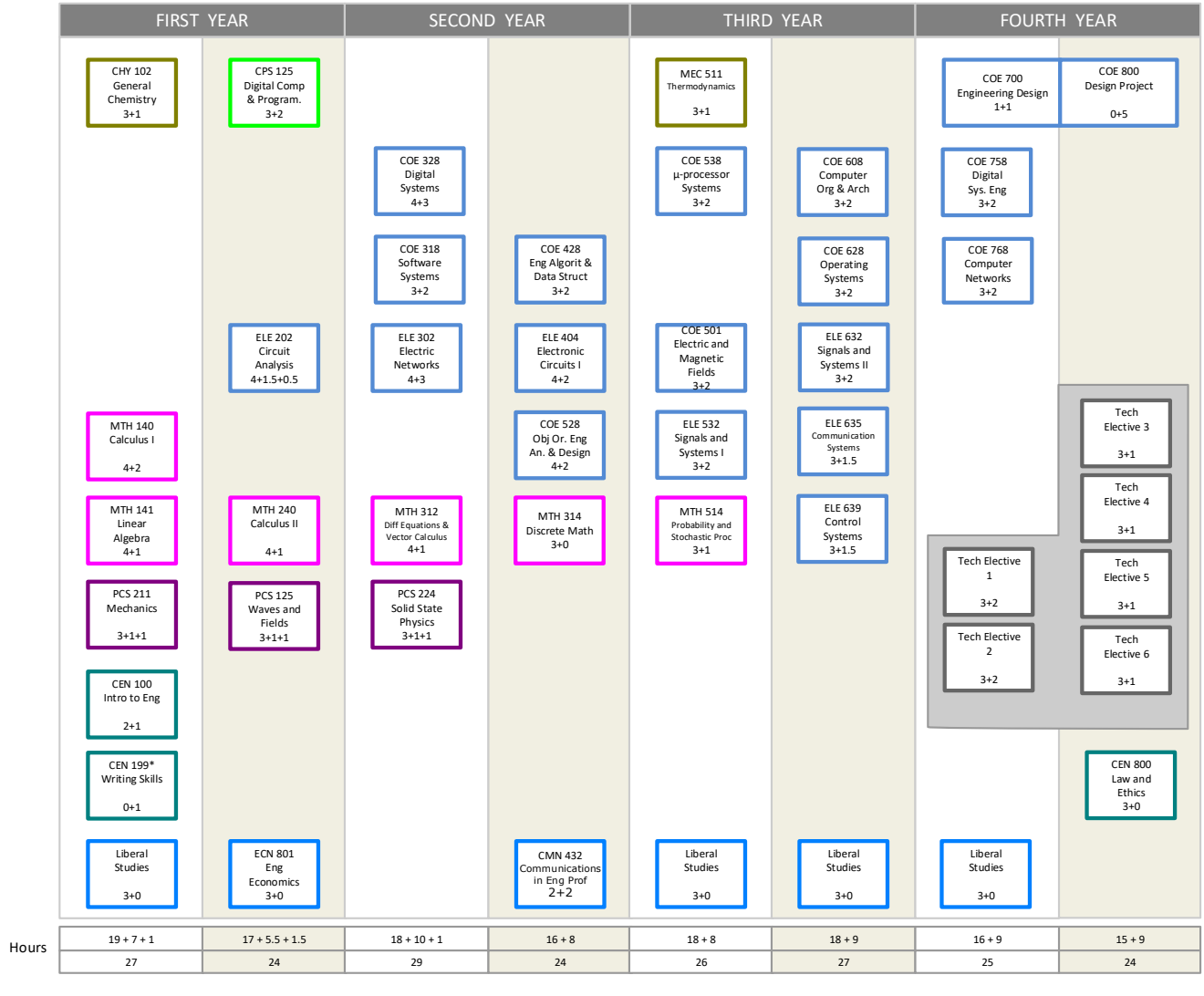
COE 892 **Distributed and Cloud Computing -** This course will introduce students to concepts in the design and implementation of large-scale distributed/cloud computing systems. The topics will range from cloud technology to

cluster and multi-core systems. The course will specifically cover the topics of cloud infrastructures, virtualization, software defined networks and storage, distributed storage systems, and programming models.
Weekly Contact Hours: Lecture – 3; Laboratory - 2
Prerequisites: COE 768

Other Prerequisite Changes – As a consequence of this curriculum change and the introduction of the Software Engineering Option, the prerequisite changes to COE 700 – Engineering Design (required of ALL COE students) will change, as follows:
Current prerequisites: COE 628, COE 608, COE 528, ELE 635, ELE 639, MEC 511 and (ELE 504 or ELE 632)
Proposed prerequisites: COE 628, COE 608, COE 528, MEC 511, MTH 514, AND [(ELE 632, (ELE 401 or ELE 501), ELE635, CPS 688) OR (ELE 632, (ELE 401 or ELE 501), ELE 635, ELE 639) OR (ELE 632, (ELE 401 or ELE 501), ELE 639, CPS 688) OR (ELE 532, CPS 688, COE 691, COE 692)].

Current COE Curriculum

Computer Engineering: Current Curriculum



Proposed New Curriculum – Calendar Copy

Semester 1-4 (common for all COE students)
1st Semester
REQUIRED:

CEN 100	Introduction to Engineering
CEN 199*	Writing Skills
CHY 102	General Chemistry
MTH 140	Calculus I
MTH 141	Linear Algebra

PCS 211 Physics: Mechanics
LIBERAL STUDIES: One course from Table A - Lower Level Liberal Studies.

2nd Semester
REQUIRED:
CPS 125 Digital Computation and Programming
ECN 801 Principles of Engineering Economics
ELE 202 Electric Circuit Analysis
MTH 240 Calculus II
PCS 125 Physics: Waves and Fields

3rd Semester
REQUIRED:
COE 318 Software Systems
COE 328 Digital Systems
ELE 302 Electric Networks
MTH 312 Differential Equations and Vector Calculus
PCS 224 Solid State Physics

4th Semester
REQUIRED:
CMN 432 Communication in the Engineering Professions
COE 428 Engineering Algorithms and Data Structures
COE 528 Object Oriented Eng Analysis and Design
ELE 404 Electronic Circuits I
MTH 314 Discrete Mathematics for Engineers

Semester 5-8 (for Regular Computer Engineering students)
5th Semester
REQUIRED:
COE 501 Electromagnetism: Theory and Effects
COE 538 Microprocessor Systems
ELE 532 Signals and Systems I
MEC 511 Thermodynamics and Fluids
MTH 514 Probability and Stochastic Processes
LIBERAL STUDIES: One course from Table A - Lower Level Liberal Studies.

6th Semester
REQUIRED: Computer Organization and Architecture
COE 608
COE 628 Operating Systems
ELE 632 Signals and Systems II
2 of following 3:
ELE 635 Communication Systems
ELE 639 Control Systems
CPS 688 Advanced Algorithms
LIBERAL STUDIES: One course from **Table B - Upper Level Liberal Studies**.
NOTE: Students who have a CLEAR Academic Standing may opt to enrol in the Co-operative Internship Program. Eligible students should select **WKT 99A/B** on the course intention form.

7th Semester
REQUIRED:
COE 700*† Engineering Design
COE 758 Digital Systems Engineering
COE 768 Computer Networks
PROFESSIONAL: Two courses from **Table I**.
LIBERAL
STUDIES: One course from the following:

ENG 503	Science Fiction
GEO 702	Technology and the Contemporary Environment
HST 701	Scientific Technology and Modern Society
PHL 709	Religion, Science and Philosophy
POL 507	Power, Change and Technology

8th Semester
REQUIRED:

CEN 800	Law and Ethics in Engineering Practice
COE 800*†	Design Project

PROFESSIONAL: Four courses from Table II.
* COE 700 has a GPA Weight of 0.50. COE 800 has a GPA Weight of 1.50.
† COE 700 and COE 800 must be taken in the same academic year.

Semesters 5-8 (for students in the Software Engineering Option)
5th Semester
REQUIRED:

CPS 510	Database Systems I
COE 538	Microprocessor Systems
ELE 532	Signals and Systems I
MEC 511	Thermodynamics and Fluids
MTH 514	Probability and Stochastic Processes

LIBERAL STUDIES: One course from Table A - Lower Level Liberal Studies.

6th Semester
REQUIRED:

COE 608	Computer Organization and Architecture
COE 628	Operating Systems
CPS 688	Advanced Algorithms
COE 691	Software Requirement Specification and Analysis
COE 692	Software Design and Architecture

LIBERAL STUDIES: One course from **Table B - Upper Level Liberal Studies**.
NOTE: Students who have a CLEAR Academic Standing may opt to enrol in the Co-operative Internship Program. Eligible students should select **WKT 99A/B** on the course intention form.

7th Semester
REQUIRED:

COE 700*†	Engineering Design
CPS 714	Software Project Management
COE 768	Computer Networks

PROFESSIONAL: Two courses from Table III.
LIBERAL STUDIES: One course from the following:

ENG 503	Science Fiction
GEO 702	Technology and the Contemporary Environment
HST 701	Scientific Technology and Modern Society
PHL 709	Religion, Science and Philosophy
POL 507	Power, Change and Technology

8th Semester

REQUIRED:

CEN 800	Law and Ethics in Engineering Practice
COE 800*†	Design Project
COE 891	Software Testing and QA
COE 892	Distributed and Cloud Computing

PROFESSIONAL: Two courses from Table IV.

* COE 700 has a GPA Weight of 0.50. COE 800 has a GPA Weight of 1.50.

† COE 700 and COE 800 must be taken in the same academic year.

Professional Table I.

A total of two courses is required from Table I.

A minimum of one of COE 718 and ELE 734 must be completed; students may take both.

COE 718	Embedded Systems Design
CPS 510	Database Systems I
ELE 531	Electromagnetics
ELE 707	Sensors and Measurement
ELE 724	CMOS Mixed-Mode Circuits and Systems
ELE 734	Low Power Digital Integrated Circuits
ELE 745	Digital Communication Systems
ELE 792	Digital Signal Processing
ELE 809	Digital Control System Design
ELE 829	System Models and Identification
ELE 882	Intro to Digital Image Processing

Professional Table II.

A total of four courses is required from Table II. as grouped and noted below.

Group 1 - A minimum of two to a maximum of three courses from the following:

COE 817	Network Security
COE 818	Advanced Computer Architecture
COE 838	Systems-on-Chip Design
COE 848	Fundamentals of Data Engineering
COE 865	Advanced Computer Networks
CPS 710	Compilers and Interpreters
CPS 888	Software Engineering

Group 2 - A minimum of one to a maximum of two courses from the following:

CPS 843	Introduction to Computer Vision
ELE 635	Communication Systems (if not already taken)
ELE 639	Control Systems (if not already taken)
ELE 725	Basics of Multimedia Systems
ELE 815	Wireless Communications
ELE 863	VLSI Circuits for Data Communications
ELE 885	Optical Communication Systems
ELE 888	Intelligent Systems

Professional Table III.

A total of **two** courses is required from Table III.

A minimum of one of COE 718 and COE 758 must be completed; students may take both.

COE 718	Embedded Systems Design
COE 758	Digital Systems Engineering
ELE 882	Intro to Digital Image Processing

Professional Table IV.
A total of two courses is required from Table IV, as grouped and noted below.
Group 1 - A minimum of one to a maximum of two courses from the following:

COE 817	Network Security
COE 838	Systems-on-Chip Design
COE 848	Fundamentals of Data Engineering
COE 865	Advanced Computer Networks
CPS 630	Web Applications
CPS 710	Compilers and Interpreters
CPS 842	Information Retrieval and Web Search
CPS 843	Introduction to Computer Vision
CPS 853	Creating Big Data Systems

Group 2 - A minimum of one to a maximum of two courses from the following:

ELE 632	Signal and Systems II
ELE 635	Communication Systems
ELE 639	Control Systems
ELE 725	Basics of Multimedia Systems
ELE 888	Intelligent Systems

Implementation Plan - The implementation date for the proposed software engineering option will be the 2020–2021 academic year, with the new courses being first offered as follows:

- *CPS 510:* Fall 2020 semester,
- *CPS 688x, COE 691,* and *COE 92z:* Winter 2021 semester,
- *CPS 714:* Fall 2021 semester and,
- *COE 891* and *COE 892:* Winter 2022 semester.

Recommendation
Having satisfied itself of the merit of this proposal, the Academic Standards Committee recommends: *That Senate approve the new Software Engineering Option in Computer Engineering.*

C. FACULTY OF SCIENCE – Modifications to the Mathematics and its Applications program
The department of Mathematics proposes the following major program change to its Mathematics and its Applications (MIA) program, effective September 2020. These changes are proposed as a result of the recent Periodic Program Review (PPR) that was approved by the Senate on June 11th, 2019.

1. Honours Designation - The first change is that the degree offered for this program has the "Honours" designation added to it. That the MIA degree meets the criteria for the Honours designation is a clear outcome of the recent PPR, which verifies that the program's curriculum has already been assessed as meeting the Quality Assurance standards for Bachelor's Degree: Honours. Similar Honours programs may be found at Brock, Waterloo, Queens, York, Laurier, Toronto and McMaster.

2. Course Changes - Second, the department will make changes to the curriculum of the MIA program, as described in the "Recommendation and Implementation Plan" submitted to ACS as a part of the PPR.

First year MIA students will now take CPS 109 (Computer Science I) instead of CPS 118 (Introductory Programming for Scientists) as their first introduction to computer programming. One of the program goals stated in the PPR is for students to have strong programming skills as they relate to mathematics. It has been the experience of the department that CPS 118 is inadequate to address the needs of our students. In later courses, where a degree of programming is involved, students express that they do not feel adequately prepared to do this

programming. The department's curriculum committee is satisfied that CPS 109 will meet the needs of the program and its students. The language of choice in CPS 109 is Python, which fits the Peer Review Team (PRT) recommendations. This course is also the first programming course taken by Computer Science students and will allow students who desire to do so to take most other courses offered by the computer science department. Students will also be better prepared to encounter the programming material they find in their mathematics (and other) courses. This will improve the level of computer programming in all aspects of the program.

"SCI I" and "SCI II" have been amalgamated into a "Required Science" table in the first year. All students are still required to take two science courses in their first year, but the amalgamation allows them more flexibility.

Finally, the common first year also sees the repositioning of MTH 108, introductory linear algebra, from the third semester to the second semester. This change is made at the recommendation of the PRT, who note that most programs in mathematics have introductory linear algebra in the first year.

Current students in the "old program" should have no problem completing their degree. Although CPS 118 will no longer be required of new incoming MIA students, the course itself will still run, as students from other science programs are required to take CPS118. Therefore, this change will cause no difficulty to out-of-phase students in the old program.

The next major change for all MIA students is the addition of MTH 260 to the third semester of the curriculum and the removal of CMN 600 from the sixth semester. One of the main weaknesses found in the PPR is how the program lives up to its goal of having students who can read, write and understand correct proofs. The curriculum committee felt that the program should start the training in this discipline as early as possible. Currently students only see proof writing as a rigorous part of their program in later years. A well thought out progression through this material is lacking. A course dedicated to proof writing, MTH 260 *Introduction to Mathematics Inquiry*, will be added to the third semester. This course is meant to begin the journey of learning the art of analytical thinking and proof writing. It is complementary to the material learned in first and second semester. This course will replace CMN 600, *Science, Communication and Society*. The students have made it clear that this is not an appropriate course for the program as the material is geared to chemistry, physics and biology students. Therefore, the inclusion of this new course is dedicated to the style of communications appropriate to mathematics: rigorous and logical thinking.

Students admitted in 2020 will first see this course in fall 2021. Students in the old program will not encounter any difficulty in their program due to this change. These students will still take CMN 600, which is a course offered to all science students, not just MIA students.

Related to this change is the repositioning of MTH 525 and MTH 617 from semesters 7 and 8 to semesters 5 and 6 respectively. The addition of MTH 260 is the *introductory* stage of the learning outcomes dedicated to rigorous and logical thinking. The final level of mastery of proof writing is to be gained in the two abstract mathematics courses, MTH 525 *Analysis* and MTH 617 *Algebra*. Presently, students find that they are unprepared to take these courses. Many have to take one or the other a second time. Since they are small course we may only offer them once per year. This causes many students difficulty as these courses are offered in the fourth year. Students who might otherwise be graduating have to wait a full year to take the course again. It is felt that with the changes outlined above, the students will be adequately prepared to engage these courses in the third year. In this way if a student still has difficulty with one or another of these courses they have an opportunity in their regular program to take it again. As these courses are small and offered on a yearly basis, there will be no issues for students in the old program.

This change will first take effect in the 2022 academic year (i.e., the third year of the changed curriculum). In that year, and a few years subsequent, the courses MTH 525 and MTH 617 will see larger than usual amounts of

students. Since the enrollment on these courses is small (about 25—30 students) even a doubling of size will not represent an issue as only one instructor and one TA will be necessary.

The rest of the changes made to the program is a shuffling of courses to accommodate the above changes. For example, the course MTH 640 is moved from the fifth semester to the seventh semester. Academically speaking, this change is neutral. From the point of view of the students in the old program, this change has no effect on their curriculum. The open elective in the first year of the old program is moved to the later years. This is for the best since students are typically not ready to choose such an elective in their first year. In the options some Liberal courses, Table II/III courses and Table I courses are shuffled. Nothing new is added or taken away otherwise. Such changes have no effect on the old program students.

Concentrations - The MIA program currently has a Computer Science option and an Economics option. Each option is a variant of the MIA program and requires the interested student to take 10 courses in the respective discipline: 4 required and 6 from an elective table. The term "option" is not presently recognized in Ryerson's Policy 2. The options will remain for the time being, and as part of the one-year follow-up to the PPR the department will present a plan to rectify this issue.

CURRENT PROGRAM

Common First Year	
MTH 207	MTH 310
MTH 110	MTH 210
SCI I	SCI II
CPS 118	Open 1
LIB A	LIB A
SCI 180	

SCI I	BLG 134
	CHY 103
	PCS 120

SCI II	BLG 144
	CHY 113
	PCS 130

Regular Program	
3rd Sem	4th Sem
MTH 304	MTH 404
MTH 330	MTH 430
MTH 108	MTH 719
Open 2	Open 3
LIB A	Open 4
5th Sem	6th Sem
MTH 501	CMN 600
MTH 640	Table I
Table I	Table I
Open 5	Open 6
LIB B	LIB B
7th Sem	8th Sem
MTH 525	MTH 617
Open 7	Open 9
Open 8	Open 10
Table I	Table I
LIB B	Table I

Comp Sci Option	
3rd Sem	4th Sem
MTH 304	MTH 404
MTH 330	MTH 430
MTH 108	MTH 719
CPS 109	CPS 209
LIB A	LIB B
5th Sem	6th Sem
MTH 501	CMN 600
MTH 640	Table I
CPS 393	Table I
CPS 305	Table II
LIB B	Table II
7th Sem	8th Sem
MTH 525	MTH 617
Table I	Table I
Table II	Table II
Table II	Table II
LIB B	Open

Economics Option	
3rd Sem	4th Sem
MTH 304	MTH 404
MTH 330	MTH 430
MTH 108	MTH 719
ECN 104	ECN 204
LIB A	Table I
5th Sem	6th Sem
MTH 501	CMN 600
MTH 640	Table I
ECN 301	Table III
ECN 504	Table III
LIB B	LIB B
7th Sem	8th Sem
MTH 525	MTH 617
Table I	Table I
Table III	Table III
Table III	Table III
LIB B	Open

Proposed Changes

Common First Year	
MTH 207	MTH 310
MTH 110	MTH 210
CPS 109	MTH 108
Req. SCI	Req. SCI
LIB A	LIB A
SCI 180	

Required Science Table (Req. SCI)		
BLG 134	BLG 144	CPS 209
CHY 103	CHY 113	
PCS 120	PCS 130	

Regular Program	
3rd Sem	4th Sem
MTH 304	MTH 404
MTH 330	MTH 430
MTH 260	MTH 719
Open 1	Open 2
LIB A	LIB B
5th Sem	6th Sem
MTH 501	MTH 617
MTH 525	Table I
Table I	Table I
Open 3	Open 5
Open 4	LIB B
7th Sem	8th Sem
MTH 640	Table I
Table I	Table I
Open 6	Open 8
Open 7	Open 9
LIB B	Open 10

Comp. Sci. Option	
3rd Sem	4th Sem
MTH 304	MTH 404
MTH 330	MTH 430
MTH 260	MTH 719
CPS 213	CPS 209*
LIB A	LIB B
5th Sem	6th Sem
MTH 501	MTH 617
MTH 525	Table I
Table I	Table II
CPS 393	Table II
CPS 305	LIB B
7th Sem	8th Sem
MTH 640	Open
Table I	Table I
Table II	Table II
Table II	Table II
LIB B	Open

Economics Option	
3rd Sem	4th Sem
MTH 304	MTH 404
MTH 330	MTH 430
MTH 260	MTH 719
ECN 104	ECN 204
LIB A	LIB B
5th Sem	6th Sem
MTH 501	MTH 617
MTH 525	Table I
Table I	Table III
ECN 301	Table III
ECN 504	LIB B
7th Sem	8th Sem
MTH 640	Open
Table I	Table I
Table III	Table III
Table III	Table III
LIB B	Open

*Students who have taken CPS 209 as part of their Required Science Table requirement are instead required to take CPS 310.

Professional Table I:

MTH 40A/B*	Thesis	MTH 660	Fixed Income Modelling
MTH 260	Introduction to Mathematical Inquiry	MTH 665	Mathematical Game Theory
MTH 322	Chaos, Fractals and Dynamics	MTH 700	Financial Mathematics I
MTH 500	Introduction to Stochastic Processes	MTH 707	Modelling and Searching Networks
MTH 503	Intro Linear Programming and Applications	MTH 710	Fourier Analysis
		MTH 712	Partial Differential Equations
MTH 540	Geometry	MTH 714	Logic and Computability
MTH 560	Problem Solving	MTH 718	Design and Codes
MTH 600	Computational Methods In Mathematics	MTH 732	Introduction to Fluid Dynamics
MTH 601	Numerical Analysis II	MTH 800	Financial Mathematics II
MTH 603	Non-Linear Programming and Applications	MTH 810	Selected Topics in Mathematics
		MTH 814	Computational Complexity
MTH 607	Graph Theory	MTH 816	Cryptography
MTH 609	Number Theory	MTH 817	Combinatorics
MTH 630	Mathematical Biology	MTH 818	Topics in Algebra
MTH 642	Data Analytics: Advanced Methods	MTH 820	Image Analysis
MTH 655	Financial Innovations	MTH 825	Topics in Analysis
		PCS 350	Computational Methods in Medical Physics

* MTH 40A/B is a two-term course; course count is 2.00.

Recommendation
Having satisfied itself of the merit of this proposal, the Academic Standards Committee recommends: *That Senate approve the modifications to the Mathematics and its Applications program.*

D. FACULTY OF ARTS – New Double Majors in Politics and Governance-Criminology; Politics and Governance-History; Politics and Governance-Sociology; Criminology-History; Criminology-Sociology; History-Sociology

The 2008-2013 Faculty of Arts Academic Plan called for the development of double majors as the second phase of curricular evolution in Arts' undergraduate programming. A pilot double-major program was created within the Faculty of Arts in 2015 which included English, History, and Philosophy. Double majors align with the goals and priorities of Ryerson's and the Faculty of Arts' new academic plans. They address student demand, increase student choice, and allow Arts' programs to remain competitive with other universities. They also have a positive impact on key learning outcomes.

Ryerson's Senate Policy 2 defines a double major as "a Senate approved program with a curricular focus in two areas offering both breadth and depth within the areas of study." The Arts one-year common platform and four-year curriculum structure were developed to accommodate a 13-course double major. In contrast to "combined majors," each Arts major is defined discreetly. For example, the Criminology major may be combined with a second major in History or Politics and Governance or Sociology. This is consistent with the curricular option at other universities, (e.g., University of Toronto, University of Western Ontario, and York University), particularly in the social sciences and humanities.

Current Arts Common Platform and Four-Year Curriculum Structure - The curriculum breakdown of the common platform programs, by course category, is shown below:

YEAR I	
Major Area Course (required or from a required group)	Major Area Course (required or from a required group)
SSH 205: Academic Writing and Research	SSH 105: Critical Thinking I

Table I Social Science Elective	Table I Social Science Elective
Table I Humanities Elective	Table I Humanities Elective
Table I or Table III Elective	Table III Elective
YEAR II	
Major Area Course (required or Table II)	Major Area Course (required or Table II)
Major Area Course (required or Table II)	Major Area Course (required or Table II)
Major Area Course (required or Table II)	Major Area Course (required or Table II)
SSH 301: Research Design and Qualitative Methods	Table I, Table III, or Table IV*
Lower Level Liberal Studies	Lower Level Liberal Studies
YEAR III	
Major Area Course (required or Table II)	Major Area Course (required or Table II)
Major Area Course (required or Table II)	Major Area Course (required or Table II)
Major Area Course (required or Table II)	Major Area Course (required or Table II)
Table III or Table IV	Table III or Table IV
Upper Level Liberal Studies	Upper Level Liberal Studies
YEAR IV	
Major Area Course (required or Table II)	Major Area Course (required or Table II)
Major Area Course (required or Table II)	Major Area Course (required or Table II)
Major Area Course (required or Table II)	Major Area Course (required or Table II)
Table III or Table IV	Table III or Table IV
Upper Level Liberal Studies	Upper Level Liberal Studies

Note: Shaded cells represent the Arts common platform.

*Table I and Table III are identical for all programs that are part of the Arts common platform. Table II and Table IV are program specific. Table II comprises courses that are professional (core) electives to that program of study. Table IV comprises courses that are professionally related (open) electives to that program of study.

Proposed Double Major Curriculum Structure (with one-year common Arts platform) -

YEAR I (Prior to Transfer into Double Major)	
Major 1 Course (required or from a required group)*	Major 1 Course (required or from a required group)*
SSH 205: Academic Writing and Research	SSH 105: Critical Thinking I
Table I Humanities Elective* (*Major 2**) (Converts to core or O/E following transfer)	Table I Humanities Elective ** (*Major 2**) (Converts to core or O/E following transfer)
Table I Social Science Elective** (*Major 2**) (Converts to core or O/E following transfer)	Table I Social Science Elective** (*Major 2**) (Converts to core or O/E following transfer)
Table I or Table III	Table III
YEAR II	
Major 1 Course (required or Table II)	Major 2 Course (required or Table II)
Major 1 Course (required or Table II)	Major 2 Course (required or Table II)
Major 1 Course (required or Table II)	Major 2 Course (required or Table II)
SSH 301: Research Design and Qualitative Methods	Table I, Table III, Table IV (Major 1), or Table IV (Major 2)
Lower Level Liberal Studies***	Lower Level Liberal Studies

YEAR III	
Major 1 Course (required or Table II)	Major 2 Course (required or Table II)
Major 1 Course (required or Table II)	Major 2 Course (required or Table II)
Major 1 Course (required or Table II)	Major 2 Course (required or Table II)
Major 1 Course (required or Table II)	Major 2 Course (required or Table II)
Upper Level Liberal Studies***	Upper Level Liberal Studies
YEAR IV	
Major 1 Course (required or Table II)	Major 2 Course (required or Table II)
Major 1 Course (required or Table II)	Major 2 Course (required or Table II)
Major 1 Course (required or Table II)	Major 2 Course (required or Table II)
Major 1 Course (required or Table II)	Major 2 Course (required or Table II)
Upper Level Liberal Studies	Upper Level Liberal Studies

* The program to which a student is admitted is referred to as Major 1, and the program Department is referred to as the "home" Department. Major 2 may be in either a humanities or social science area.

** Students who pursue a double major in two humanities areas (e.g., History and Philosophy) must select two Table I social science courses. Students who pursue a double major in two social science areas (e.g., Criminology and Sociology) must select two Table I humanities courses. Students who pursue a humanities and social science double major (e.g., Criminology and History) must select two Table I courses from the humanities or social sciences. Since students do not enter the double majors until second year, they are most likely to take the Table I electives as required by their first year program.

*** Liberal studies courses in the Major 1 and Major 2 areas cannot be used to fulfil Liberal Studies requirements.

Note: Students cannot complete a Minor in either of their Double Major areas.

Double Major Application and Approval Process - Students will continue to be admitted into an Arts common platform B.A. program or into Undeclared Arts. Students who choose to double major may apply to do so in their second semester of studies, for transfer to the double major for the Fall term of their second year of studies. The application process will be similar to the application process for transfer to another Arts common platform program. Students will be required to submit a double-major application to their Major 1 ("home") program office by February 2nd of their second semester. Double-major applications must be approved by the Undergraduate Program Director of the Major 1 and Major 2 Departments. Applications will be considered on a competitive basis subject to program capacity, and therefore, double major choice cannot be guaranteed.
In order to transfer to a double major, students must:

- Have a Clear Academic Standing at the end of the Winter term in which they apply to a double major;
- Complete the required foundation course in the first and second major, as identified by the Major 1 and Major 2 departments, respectively; and
- Meet the minimum CGPA requirement, if specified by the Major 1 and/or Major 2 department.

For administrative purposes, the Department responsible for the program of entry (Major 1) will have primary responsibility for providing academic advising and support to students who double major. Double major students will be referred to the Major 2 department, as needed, for academic advising.

Double major students will be allowed to apply to transfer to a different double major or to transfer back to a single major (either back to their program of entry or to a different single major). Such transfer requests will be accepted, contingent on the student meeting the course, academic standing, and, where relevant, CGPA requirements for program transfer. The process will be handled internally, within the Faculty, as are all other Arts' common platform program transfer requests. Double major students will be required to submit a program transfer

form, by the February 2nd deadline, to their home department. The form must be signed by their program of entry (Major 1), the Major 2 department, the department or departments to which they choose to transfer (if different from the Major 1 and/or Major 2 department), and by the Dean's office.

Overall Learning Outcomes - The overall learning outcomes of the BA Double Majors in Criminology and History, Criminology and Politics and Governance, Criminology and Sociology, History and Politics and Governance, History and Sociology, and Politics and Governance and Sociology are designed to produce the same skill-set as that of the singular BA student. Specifically, the goals of the proposed double majors are to graduate students who:

- Have mastered the ability to critically analyze arguments, claims, and data;
- Are familiar with both qualitative and quantitative research methods employed in the Humanities and Social Sciences;
- Will appreciate the complexities in various academic interpretations, and will be able to think critically about the normative assumptions governing both particular interpretations and interpretation in general;
- Are capable of developing probing research questions, conducting effective research, and persuasively communicating the results of their inquiry in a variety of oral and written modes;
- Possess a superior set of "career-ready" research, analytical, and oral and written skills, and know how to apply them to professional situations as well as to post-graduate study opportunities; and
- Demonstrate discipline-specific knowledge and skills by acting as responsible academic and community citizens, both locally and globally.

Discipline-Specific Learning Outcomes - Students pursuing double majors will also be expected to develop "discipline-specific" knowledge and skills, as outlined in the "Learning Objectives" statements of singular major programs.

Calendar Format for Double Major in Criminology and History:

Admissions Information

Applicants interested in the double major program in Criminology and History must apply for admission to one of the ten major programs (Criminology, English, Environment and Urban Sustainability, Geographic Analysis, History, Language and Intercultural Relations, Philosophy, Politics and Governance, Psychology or Sociology), or to Undeclared Arts. Students are not admitted directly to a double major.

The Faculty of Arts accepts applications for transfer to a double major program in the second semester of studies. Approved transfer students commence studies in the double major program in second year. Further details on the process will be provided by the Faculty of Arts during first semester.

Bachelor of Arts (Double Major, Criminology and History)

1st & 2nd Semester

Begins 2020-2021.

REQUIRED:
CRM 100 Introduction to Canadian Criminal Justice
CRM 102 Introduction to Criminology
SSH 105 Critical Thinking I
SSH 205 Academic Writing and Research
REQUIRED GROUP 1:
One course from Table I: (Humanities)
One course from Table I: (Social Sciences)
REQUIRED GROUP 2: Two of the following courses
HIS 104 Ten Days That Shook The World
HIS 105 Inventing Popular Culture
HIS 106 Technology, Warfare and Social Change

HIS 107 Colonization, Colonialism and Independence
HIS 238 Canada to 1885: Creating a Nation
HIS 248 American History to 1877
HIS 265 Asia: Foundations and Modern Nations
HIS 275 Ancient Greece and Rome
HIS 277 Mediaeval Europe, 400-1350
HIS 279 Europe, 1715-1870
HIS 338 Canada since 1885: Defining a Nation
HIS 348 American History from 1877
HIS 377 Europe, 1350-1715
HIS 379 Europe, 1870-Present
HIS 461 Cradle of Civilization: Ancient Near East
HIS 462 Introduction to the Islamic World
HIS 490 International Relations from 1945
Any two HST courses (numbers between HST100 and HST499).
In the total degree, a maximum of four liberal studies HST courses may be substituted for HIS courses.
PROFESSIONALLY RELATED: One course from Table I or Table III.
PROFESSIONALLY RELATED: One course from Table III.

3rd & 4th Semester
Begins 2020-2021.
REQUIRED:
CRM 200 Criminal Law
CRM 204 Criminal Justice Research and Statistics
CRM 400 Indigenous Gov/Justice
HIS 401 Hearing, Seeing, and Speaking History
SSH 301 Research Design and Qualitative Methods
REQUIRED GROUP 2: Two of the following courses
HIS 104 Ten Days That Shook The World
HIS 105 Inventing Popular Culture
HIS 106 Technology, Warfare and Social Change
HIS 107 Colonization, Colonialism and Independence
HIS 238 Canada to 1885: Creating a Nation
HIS 248 American History to 1877
HIS 265 Asia: Foundations and Modern Nations
HIS 275 Ancient Greece and Rome
HIS 277 Mediaeval Europe, 400-1350
HIS 279 Europe, 1715-1870
HIS 338 Canada since 1885: Defining a Nation
HIS 348 American History from 1877
HIS 377 Europe, 1350-1715
HIS 379 Europe, 1870-Present
HIS 461 Cradle of Civilization: Ancient Near East
HIS 462 Introduction to the Islamic World
HIS 490 International Relations from 1945
Any two HST courses (numbers between HST100 and HST499).
In the total degree, a maximum of four liberal studies HST courses may be substituted for HIS courses
LIBERAL STUDIES: Two courses from Table A.
PROFESSIONALLY RELATED: One course from Table I, Table III, Table IV (Criminology), or Table IV (History)
Neither CRM nor HIS (nor HST) courses may be taken for Professionally-Related credit.

5th & 6th Semester
Begins 2022-2023.
REQUIRED:
CRM 322 Ethics in Criminal Justice
HIS 505 Locating the Past: Archival Research
REQUIRED GROUP 1: One of the following
HIS 500 History and New Media
HIS 501 Archaeology and Material Culture
HIS 502 Life Stories: Oral History
HIS 755 Themes in Material Culture
REQUIRED GROUP 2: One of the following
CRM 310 Advanced Qualitative Research Methods
CRM 315 Advanced Quantitative Research Methods
REQUIRED GROUP 3: Two courses from the following
CRM 300 Policing in Canada
CRM 306 Corrections in Canada
CRM 308 Criminal Courts in Canada
PROFESSIONAL: Two courses from **History Table II**
UPPER LIBERAL STUDIES: Two courses from Table B

7th & 8th Semester
Begins 2023-202
REQUIRED
CRM 406 Seminar in Criminal Justice
REQUIRED GROUP 4: One of the following:
HIS 902 Thesis Course
HIS 903 Senior Seminar I: Cross-Field Study
HIS 916 Senior Seminar II: Science, Technology and Medicine
HIS 931 Senior Seminar III: Americas
HIS 956 Senior Seminar IV: Africa
HIS 957 Senior Seminar V: Middle East
HIS 958 Senior Seminar VI: Asia
HIS 976 Senior Seminar VII: Europe
HIS 990 Senior Seminar VIII: International Relations
PROFESSIONAL: Three courses from **History** Table II
PROFESSIONAL: Three courses from **Criminology** Table II
UPPER LIBERAL STUDIES: Two courses from Table B

Criminology and History Double Major - Professional Table II

Criminology: A total of **three CRM courses** must be taken in total.
History : A total of **five HIS courses** must be taken in total.

- HST courses (numbered between HST 500-899) may be substituted.
- In the total degree, a maximum of four (4) liberal studies HST courses may be substituted for HIS courses.

Criminology:
CRM 201 Making Public Order in Canada
CRM 202 Victims and the Criminal Process
CRM 205 Gender, Sexuality and the Law
CRM 206 Race, Ethnicity and Justice
CRM 300* Policing in Canada
CRM 302 Criminological Theories
CRM 303 Immigration and Refugee Protection in CJS

CRM 304 Youth Justice in Canada
CRM 306* Corrections in Canada
CRM 308* Criminal Courts in Canada
CRM 310* Advanced Qualitative Research Methods
CRM 311 Regulating Public Space
CRM 312 Representing Crime
CRM 314 Criminal Justice and the Charter
CRM 315† Advanced Quantitative Research Methods
CRM 316 International Perspectives
CRM 317 Special Topics in Criminology/Law
CRM 318 Violence and Communities
CRM 402 Criminal Justice and Social Inequality
CRM 404 Debates In Justice Policy (students admitted Fall 2014 and after only)
PHL 400 Human Rights and Justice
PHL 449 Philosophy of Punishment
PSY 300 Psychology and Law

*** If not selected in 5th & 6th semester.**

History:

A total of **five HIS courses** must be taken in total.

- HST courses (numbered between HST 500-899) may be substituted.
- In the total degree, a maximum of four (4) liberal studies HST courses may be substituted for HIS courses.

HIS 500 History and New Media
HIS 501 Archaeology and Material Culture
HIS 502 Life Stories: Oral History
HIS 510 Museology and Public History
HIS 541 Canada and the First World War
HIS 556 Colonial Africa
HIS 559 Ancient Egypt
HIS 561 The Ottoman Empire
HIS 590 Modern International Relations
HIS 594 War to War: World Conflict, 1900-45
HIS 610 Curating the Past
HIS 615 Film, Television and 20th C History
HIS 656 Post-Colonial Africa
HIS 661 The Middle East from 1908
HIS 662 The Mughal Empire, 1526-1764
HIS 677 Society in the High Middle Ages, 1000-1500
HIS 678 The Renaissance in Europe
HIS 683 Victorian Britain
HIS 696 The History of Terrorism
HIS 710 Museum and Heritage Management
HIS 742 Canadian Cultural Industries
HIS 755 Themes in Material Culture
HIS 762 The Making of Modern South Asia, 1757-1947
HIS 783 20th-Century Britain
HIS 790 Modern Germany
HIS 826 Science and World Exploration
HIS 828 Science, Corporations and the Environment
HIS 845 Canada in the International Sphere
HIS 854 African-American History
HIS 886 The British Empire and the World
HIS 898 A History of International Organizations
HIS 900 Experiential Learning I
HIS 901 Experiential Learning II

Calendar Format for Double Major in Criminology and Politics and Governance:

Admissions Information

Applicants interested in the double major program in Criminology and Politics and Governance must apply for admission to one of the ten major programs (Criminology, English, Environment and Urban Sustainability, Geographic Analysis, History, Language and Intercultural Relations, Philosophy, Politics and Governance, Psychology or Sociology), or to Undeclared Arts. Students are not admitted directly to a double major.
The Faculty of Arts accepts applications for transfer to a double major program in the second semester of studies. Approved transfer students commence studies in the double major program in second year. Further details on the process will be provided by the Faculty of Arts during first semester.

Bachelor of Arts (Double Major, Criminology and Politics and Governance)

1st & 2nd Semester
Begins 2020-2021.
REQUIRED:
CRM 100 Introduction to Canadian Justice
CRM 102 Introduction to Criminology
POG 100 People, Power, Politics
POG 110 Power and Influence in Canadian Politics
SSH 105 Critical Thinking I
SSH 205 Academic Writing and Research
REQUIRED GROUP 1: Two courses from Table I (Humanities)
PROFESSIONALLY RELATED: One course from Table I or Table III.
PROFESSIONALLY RELATED: One course from Table III.

3rd & 4th Semester
Begins 2020-2021.
REQUIRED GROUP 2: One of the following pairs (two courses):
CRM 204 Criminal Justice Research and Statistics
And **one course** from Politics Table II
OR
POG 230 Statistics and Social Sciences
And **one course** from Criminology Table II
REQUIRED GROUP 3:
CRM 200 Criminal Law
CRM 400 Indigenous Governance/Justice
SSH 301 Research Design and Qualitative Methods
REQUIRED GROUP 4: Two courses from the following
POG 210 Power and Authority in Canada
POG 214 Controversial Policy Topics
POG 225 Global Governance
POG 235 Western Political Thought
POG 240 Intro to Comparative Politics
LIBERAL STUDIES: Two courses from Table A.
PROFESSIONALLY RELATED: One course from Table I, Table III, Table IV (Criminology), or Table IV (Politics and Governance)
Neither CRM nor POG courses may be taken to satisfy Professionally-Related requirements.

5th & 6th Semester
Begins 2021-2022.
REQUIRED:

CRM 322 Ethics in Criminal Justice
REQUIRED GROUP 5: One of the following
CRM 310 Advanced Qualitative Research Methods
CRM 315 Advanced Quantitative Research Methods
REQUIRED GROUP 6: Two courses from the following:
CRM 300 Policing in Canada
CRM 306 Corrections in Canada
CRM 308 Criminal Courts in Canada
PROFESSIONAL: Four courses from **Politics Table II** *
UPPER LIBERAL STUDIES: Two courses from Table B

7th & 8th Semester
Begins 2022-2023
REQUIRED:
CRM 406 Seminar in Criminal Justice
PROFESSIONAL: Four courses from **Politics Table II** *
PROFESSIONAL: Three courses from **Criminology Table II**
UPPER LIBERAL STUDIES: Two courses from Table B
* of the total number of POG Table II electives required, a minimum of three must be completed at the 400-level

Criminology and Politics and Governance Double Major - Professional Table II

Criminology: A minimum of **three CRM courses** must be taken in total.
Politics and Governance: A minimum of **eight POG courses** must be taken in total, at least 3 of which must be at the 400-level)

Criminology:
CRM 201 Making Public Order in Canada
CRM 202* Victims and the Criminal Process
CRM 205* Gender, Sexuality and the Law
CRM 206* Race, Ethnicity and Justice
CRM 300† Policing in Canada
CRM 302 Criminological Theories
CRM 303 Immigration and Refugee Protection in CJS
CRM 304 Youth Justice in Canada
CRM 306† Corrections in Canada
CRM 308† Criminal Courts in Canada
CRM 310† Advanced Qualitative Research Methods
CRM 311 Regulating Public Space
CRM 312 Representing Crime
CRM 314 Criminal Justice and the Charter
CRM 315† Advanced Quantitative Research Methods
CRM 316 International Perspectives
CRM 317 Special Topics in Criminology/Law
CRM 318 Violence and Communities
CRM 402* Criminal Justice and Social Inequality
CRM 404 Debates In Justice Policy (students admitted Fall 2014 and after only)
*** If not selected in 3rd & 4th semester.**
† If not selected in 5th & 6th semester.

Politics and Governance
A minimum of **eight POG courses** must be taken in total, at least 3 of which must be at the 400-level)
Canadian
POG 210 Power and Authority in Canada
POG 310 Provincial Politics
POG 313 The Politics of Race and Ethnicity
POG 315 Equity and Human Rights in Canada

POG 410 Canadian Urban Politics
POG 416 The Politics of Canadian Federalism
POG 417 Canadian-American Relations

Policy

POG 214 Controversial Policy Topics
POG 316 Social Policy
POG 317 Education Politics and Policy
POG 411 Canadian Foreign Policy
POG 412 Government and the Economy
POG 415 Environmental Politics and Policy

Global

POG 225 Global Governance
POG 323 The Politics of International Development
POG 324 Global Political Economy
POG 423 Nationalism and Identity
POG 424 Human Rights and Global Politics
POG 425 Regional Economic and Political Integration
POG 426 Global Conflict and Peace
POG 427 Women, War, and Peace

Comparative

POG240 Intro to Comparative Politics
POG 440 Indigenous Governance/Justice
POG 442 Women and Comparative Politics
POG 443 Global Cities
POG 444 Politics, Media and Technology
POG 446 Voters, Elections, and Parties

Theory

POG 235 Western Political Thought
POG 320 Social Identity and Citizenship
POG 430 Contemporary Political Thought
POG 431 Power, Domination and Resistance

Unclassified

INP 900 Understanding the Nonprofit Sector
POG 490 Politics and Governance Topics
POG 498 Directed Research in Politics
POG 499 Field Experience

NOTE:

1. With advance written approval of the Department, Public Administration (PPA) courses may be substituted for Table II Professional courses at an equivalent level.

With advance written approval of the Department, Upper Level Politics (POL) liberal studies courses may be substituted for Table II Professional courses at the 300-level (i.e., POG 300 - 399).

Calendar Format for Double Major in Criminology and Sociology

Admissions Information

Applicants interested in the double major program in Criminology and Sociology must apply for admission to one of the ten major programs (Criminology, English, Environment and Urban Sustainability, Geographic Analysis, History, Language and Intercultural Relations, Philosophy, Politics and Governance, Psychology or Sociology), or to Undeclared Arts. Students are not admitted directly to a double major.

The Faculty of Arts accepts applications for transfer to a double major program in the second semester of studies. Approved transfer students commence studies in the double major program in second year. Further details on the process will be provided by the Faculty of Arts during first semester.

Bachelor of Arts (Double Major, Criminology and Sociology)

1st & 2nd Semester

Begins 2020-2021.
REQUIRED:
CRM 100 Introduction to Canadian Criminal Justice
CRM 102 Introduction to Criminology
SOC 105 Introduction to Sociology
SOC 107 Sociology of the Everyday
SSH 105 Critical Thinking I
SSH 205 Academic Writing and Research
REQUIRED GROUP 1: Two courses from Table I (Humanities) PROFESSIONALLY RELATED: One course from Table I or Table III.
PROFESSIONALLY RELATED: One course from Table III.

3rd & 4th Semester
Begins 2020-2021.
REQUIRED GROUP 2: One of the following pairs (2 courses):
CRM 204 Criminal Justice Research and Statistics; and
And **one course** selected from **Sociology** **Table II**
OR
SOC 411 Intro to Quantitative Data Analysis or equivalent
And **one course** selected from **Criminology** **Table II**
REQUIRED:
CRM 200 Criminal Law
CRM 400 Indigenous Governance/Justice
SOC 470 Toronto: The Changing City
SOC 473 Classical Sociological Theory
SSH 301 Research Design and Qualitative Methods
PROFESSIONALLY RELATED: One course from Table I, Table III, Table IV (Criminology), or Table IV (Sociology)
Course selection must not include courses with a CRM or SOC course code.
LIBERAL STUDIES: Two courses from Table A.

5th & 6th Semester
Begins 2021-2022.
REQUIRED:
CRM 322 Ethics in Criminal Justice
SOC 475 Contemporary Sociological Theory
SOC 481 Survey Design and Analysis
REQUIRED GROUP 1: One of the following
CRM 310 Advanced Qualitative Research Methods
CRM 315 Advanced Quantitative Research Methods
REQUIRED GROUP 2: Two courses from the following:
CRM 300 Policing in Canada
CRM 306 Corrections in Canada
CRM 308 Criminal Courts in Canada
REQUIRED GROUP 3: One course from the following:
SOC 482 Advanced Methods of Media Analysis
SOC 483 Advanced Statistical Analysis
REQUIRED GROUP 4: One course from the following:
SOC 300 Sociology of Equity and Diversity
SOC 420 Social Class in Changing Times
SOC 525 Media and Images of Inequality

SOC 608 Women, Power and Change
UPPER LIBERAL STUDIES: Two courses from Table B

7th & 8th Semester
Begins 2022-2023
REQUIRED:
CRM 406 Seminar in Criminal Justice
SOC 490 Capstone
SOC 427 Indigenous Perspectives on Canada
PROFESSIONAL: Two courses from **Sociology Table II**
PROFESSIONAL: Three courses from **Criminology Table II**
UPPER LIBERAL STUDIES: Two courses from Table B

Criminology and Sociology Double Major - Professional Table II

Criminology: A minimum of three CRM courses must be taken.
Sociology: **A minimum of two SOC courses** must be taken.

Criminology:

CRM 201 Making Public Order in Canada
CRM 202* Victims and the Criminal Process
CRM 205* Gender, Sexuality and the Law
CRM 206* Race, Ethnicity and Justice
CRM 300† Policing in Canada
CRM 302 Criminological Theories
CRM 303 Immigration and Refugee Protection in CJS
CRM 304 Youth Justice in Canada
CRM 306† Corrections in Canada
CRM 308† Criminal Courts in Canada
CRM 310† Advanced Qualitative Research Methods
CRM 311 Regulating Public Space
CRM 312 Representing Crime
CRM 314 Criminal Justice and the Charter
CRM 315† Advanced Quantitative Research Methods
CRM 316 International Perspectives
CRM 317 Special Topics in Criminology/Law
CRM 318 Violence and Communities
CRM 402* Criminal Justice and Social Inequality
CRM 404 Debates In Justice Policy (students admitted Fall 2014 and after only)

*** If not selected in 3rd & 4th semester.**
† If not selected in 5th & 6th semester.

Sociology:

A maximum of two (2) courses, marked with a dagger (†), can be used toward Table II requirements.

SOC 300** Sociology of Equity and Diversity
SOC 302 The City and Society
SOC 319 Sociological Perspectives on Crime
SOC 402 The City and Social Problems
SOC 420** Social Class in Changing Times
SOC 472 At Work in a Changing World
SOC 474 Immigration, Borders and Belonging
SOC 476 Sociology of Fear
SOC 477 Sociology of Advertising
SOC 478 Sociology of Fun
SOC 479 Social Networks and the World Wide Web
SOC 491* Independent Senior Research Project
SOC 500 Youth and Society

SOC 502 Violence and the Family
SOC 503† Sociology of Education
SOC 504 Children and Society
SOC 505† Sociology of Sport
SOC 506† Health and Society
SOC 530 Blackness and Freedom
SOC 595 Women and Aging
SOC 603† Sociology of Gender
SOC 605 Families: Difference and Diversity
SOC 606 Work and Families in the 21st Century
SOC 608** Women, Power and Change
SOC 609 Women and Human Rights
SOC 611 Future Worlds: Technology and Social Change
SOC 633† Sex, Gender Identities and Sexualities
SOC 700 Men and Masculinities in the 21st Century
SOC 702† Anatomy of Human Conflict
SOC 703† Women, Power and the Global South
SOC 704† Aging, Culture and Society
SOC 705† Law and Justice
SOC 706 Globalized Labour and Consumption
SOC 707† Religion, Meaning and Power
SOC 708 Environmental Sociology
SOC 801† Global Power Relations
SOC 802† Issues in War and Peace
SOC 803 International Community Engagement
SOC 808† Sociology of Food and Eating
SOC 885† Women in Islam
SOC 902† Hollywood and Society
SOC 903 Action Cinema and Modernity
SOC 904 Women in Popular Culture
SOC 931 Waste and Consumerism
SOC 932 The Entertainment Industry
SOC 941 Colonialism and Racialization
SOC 942 Women and Structural Change
SOC 943 Poverty Issues

* Departmental approval required.
** If not previously selected.

Calendar Format for Double Major in History and Politics and Governance

Admissions Information

Applicants interested in the double major program in History and Politics and Governance must apply for admission to one of the ten major programs (Criminology, English, Environment and Urban Sustainability, Geographic Analysis, History, Language and Intercultural Relations, Philosophy, Politics and Governance, Psychology or Sociology), or to Undeclared Arts. Students are not admitted directly to a double major.
The Faculty of Arts accepts applications for transfer to a double major program in the second semester of studies. Approved transfer students commence studies in the double major program in second year. Further details on the process will be provided by the Faculty of Arts during first semester.

Bachelor of Arts (Double Major, History and Politics and Governance)

1st & 2nd Semester

Begins 2020-2021.
REQUIRED:
POG 100 People, Power, Politics

POG 110 Power and Influence in Canadian Politics
SSH 105 Critical Thinking I
SSH 205 Academic Writing and Research
REQUIRED GROUP 1:
One course from Table I (Humanities)
One course from Table I (Social Sciences)
REQUIRED GROUP 2: Two of the following courses
HIS 104 Ten Days That Shook The World
HIS 105 Inventing Popular Culture
HIS 106 Technology, Warfare and Social Change
HIS 107 Colonization, Colonialism and Independence
HIS 238 Canada to 1885: Creating a Nation
HIS 248 American History to 1877
HIS 265 Asia: Foundations and Modern Nations
HIS 275 Ancient Greece and Rome
HIS 277 Mediaeval Europe, 400-1350
HIS 279 Europe, 1715-1870
HIS 338 Canada since 1885: Defining a Nation
HIS 348 American History from 1877
HIS 377 Europe, 1350-1715
HIS 379 Europe, 1870-Present
HIS 461 Cradle of Civilization: Ancient Near East
HIS 462 Introduction to the Islamic World
HIS 490 International Relations from 1945
Any two HST courses (numbers between HST100 and HST499).
In the total degree, a maximum of four liberal studies HST courses may be substituted for HIS courses.
PROFESSIONALLY RELATED: One course from Table I or Table III.
PROFESSIONALLY RELATED: One course from Table III.

3rd & 4th Semester
Begins 2020-2021.
REQUIRED:
HIS 401 Hearing, Seeing, and Speaking History
POG 230 Statistics and Social Science
SSH 301 Research Design and Qualitative Methods
REQUIRED GROUP 3: Two courses from the following
POG 210 Power and Authority in Canada
POG 214 Controversial Policy Topics
POG 225 Global Governance
POG 235 Western Political Thought
POG 240 Intro to Comparative Politics
REQUIRED: Two courses (not previously taken) from Required Group 2:
HIS 104 Ten Days That Shook The World
HIS 105 Inventing Popular Culture
HIS 106 Technology, Warfare and Social Change
HIS 107 Colonization, Colonialism and Independence
HIS 238 Canada to 1885: Creating a Nation
HIS 248 American History to 1877
HIS 265 Asia: Foundations and Modern Nations
HIS 275 Ancient Greece and Rome
HIS 277 Mediaeval Europe, 400-1350

HIS 279 Europe, 1715-1870
HIS 338 Canada since 1885: Defining a Nation
HIS 348 American History from 1877
HIS 377 Europe, 1350-1715
HIS 379 Europe, 1870-Present
HIS 461 Cradle of Civilization: Ancient Near East
HIS 462 Introduction to the Islamic World
HIS 490 International Relations from 1945
Any two HST courses (numbers between HST100 and HST499).
In the total degree, a maximum of four liberal studies HST courses may be substituted for HIS courses.
PROFESSIONALLY RELATED: One course from Table I, Table III, Table IV (History), or Table IV (Politics and Governance)
Neither HIS (or HST) nor POG courses may be used to satisfy Professionally-Related requirements.
LIBERAL STUDIES: Two courses from Table A.

5th & 6th Semester
Begins 2021-2022.
REQUIRED:
HIS 505 Locating the Past: Archival Research
REQUIRED GROUP 4: One of the following
HIS 500 History and New Media
HIS 501 Archaeology and Material Culture
HIS 502 Life Stories: Oral History
HIS 755 Themes in Material Culture
PROFESSIONAL: Two courses from **History** **Table II**
PROFESSIONAL: Four courses from **Politics** **Table II** *
UPPER LIBERAL STUDIES: Two courses from Table B

7th & 8th Semester
Begins 2022-2023.
REQUIRED
PROFESSIONAL: One HIS course at the 900 level
HIS 902 Thesis Course
HIS 903 Senior Seminar I: Cross-Field Study
HIS 916 Senior Seminar II: Science, Technology and Medicine
HIS 931 Senior Seminar III: Americas
HIS 956 Senior Seminar IV: Africa
HIS 957 Senior Seminar V: Middle East
HIS 958 Senior Seminar VI: Asia
HIS 976 Senior Seminar VII: Europe
HIS 990 Senior Seminar VIII: International Relations
PROFESSIONAL: Four courses from **Politics** **Table II** *
PROFESSIONAL: Three courses from **History** **Table II**
UPPER LIBERAL STUDIES: Two courses from Table B
* of the total number of POG Table II electives required, a minimum of three must be completed at the 400-level

History and Politics and Governance Double Major - Professional Table II

History : A total of **five HIS courses** must be taken in total.

- HST courses (numbered between HST 500-899) may be substituted.
- In the total degree, a maximum of four (4) liberal studies HST courses may be substituted for HIS courses.

Politics and Governance: **A total of eight POG courses** must be taken, at least three of which must be at the 400-level

History

HIS 500 History and New Media
HIS 501 Archaeology and Material Culture
HIS 502 Life Stories: Oral History
HIS 510 Museology and Public History
HIS 541 Canada and the First World War
HIS 556 Colonial Africa
HIS 559 Ancient Egypt
HIS 561 The Ottoman Empire
HIS 590 Modern International Relations
HIS 594 War to War: World Conflict, 1900-45
HIS 610 Curating the Past
HIS 615 Film, Television and 20th C History
HIS 656 Post-Colonial Africa
HIS 661 The Middle East from 1908
HIS 662 The Mughal Empire, 1526-1764
HIS 677 Society in the High Middle Ages, 1000-1500
HIS 678 The Renaissance in Europe
HIS 683 Victorian Britain
HIS 696 The History of Terrorism
HIS 710 Museum and Heritage Management
HIS 742 Canadian Cultural Industries
HIS 755 Themes in Material Culture
HIS 762 The Making of Modern South Asia, 1757-1947
HIS 783 20th-Century Britain
HIS 790 Modern Germany
HIS 826 Science and World Exploration
HIS 828 Science, Corporations and the Environment
HIS 845 Canada in the International Sphere
HIS 854 African-American History
HIS 886 The British Empire and the World
HIS 898 A History of International Organizations
HIS 900 Experiential Learning I
HIS 901 Experiential Learning II

Politics and Governance: A total of eight POG courses must be taken, at least three of which must be at the 400-level

Canadian

POG 210 Power and Authority in Canada
POG 310 Provincial Politics
POG 313 The Politics of Race and Ethnicity
POG 315 Equity and Human Rights in Canada
POG 410 Canadian Urban Politics
POG 416 The Politics of Canadian Federalism
POG 417 Canadian-American Relations

Policy

POG 214 Controversial Policy Topics
POG 316 Social Policy
POG 317 Education Politics and Policy
POG 411 Canadian Foreign Policy
POG 412 Government and the Economy
POG 415 Environmental Politics and Policy

Global

POG 225 Global Governance
POG 323 The Politics of International Development
POG 324 Global Political Economy
POG 423 Nationalism and Identity
POG 424 Human Rights and Global Politics

POG 425 Regional Economic and Political Integration
POG 426 Global Conflict and Peace
POG 427 Women, War, and Peace

Comparative

POG240 Intro to Comparative Politics
POG 440 Indigenous Governance/Justice
POG 442 Women and Comparative Politics
POG 443 Global Cities
POG 444 Politics, Media and Technology
POG 446 Voters, Elections, and Parties

Theory

POG 235 Western Political Thought
POG 320 Social Identity and Citizenship
POG 430 Contemporary Political Thought
POG 431 Power, Domination and Resistance

Unclassified

INP 900 Understanding the Nonprofit Sector
POG 490 Politics and Governance Topics
POG 498 Directed Research in Politics
POG 499 Field Experience

NOTE: With advance written approval of the Department, Public Administration (PPA) courses may be substituted for Table II Professional courses at an equivalent level.

With advance written approval of the Department, Upper Level Politics (POL) liberal studies courses may be substituted for Table II Professional courses at the 300-level (i.e., POG 300 - 399).

Calendar Format for Double Major in History and Sociology

Admissions Information

Applicants interested in the double major program in History and Sociology must apply for admission to one of the ten major programs (Criminology, English, Environment and Urban Sustainability, Geographic Analysis, History, Language and Intercultural Relations, Philosophy, Politics and Governance, Psychology or Sociology), or to Undeclared Arts. Students are not admitted directly to a double major.

The Faculty of Arts accepts applications for transfer to a double major program in the second semester of studies. Approved transfer students commence studies in the double major program in second year. Further details on the process will be provided by the Faculty of Arts during first semester.

Bachelor of Arts (Double Major, History and Sociology)

1st & 2nd Semester

Begins 2020-2021.

REQUIRED:

SOC 105 Intro to Sociology
SOC 107 Sociology of the Everyday
SSH 105 Critical Thinking I
SSH 205 Academic Writing and Research

REQUIRED GROUP 1:

One course from Table I (Humanities)
One course from Table I (Social Sciences)

REQUIRED GROUP 2: Two of the following courses

HIS 104 Ten Days That Shook The World
HIS 105 Inventing Popular Culture
HIS 106 Technology, Warfare and Social Change
HIS 107 Colonization, Colonialism and Independence
HIS 238 Canada to 1885: Creating a Nation

HIS 248 American History to 1877
HIS 265 Asia: Foundations and Modern Nations
HIS 275 Ancient Greece and Rome
HIS 277 Mediaeval Europe, 400-1350
HIS 279 Europe, 1715-1870
HIS 338 Canada since 1885: Defining a Nation
HIS 348 American History from 1877
HIS 377 Europe, 1350-1715
HIS 379 Europe, 1870-Present
HIS 461 Cradle of Civilization: Ancient Near East
HIS 462 Introduction to the Islamic World
HIS 490 International Relations from 1945
Any two HST courses (numbers between HST100 and HST499).
In the total degree, a maximum of four liberal studies HST courses may be substituted for HIS courses.
PROFESSIONALLY RELATED: One course from Table I or Table III.
PROFESSIONALLY RELATED: One course from Table III.

3rd & 4th Semester
Begins 2020-2021.
REQUIRED:
HIS 401 Hearing, Seeing, and Speaking History
SOC 470 Toronto: The Changing City
SOC 473 Classical Sociological Theory
SOC 411 Introduction to Quantitative Data Analysis or equivalent
SSH 301 Research Design and Qualitative Methods
REQUIRED GROUP 2: Two courses (not previously taken) from Required Group 2:
HIS 104 Ten Days That Shook The World
HIS 105 Inventing Popular Culture
HIS 106 Technology, Warfare and Social Change
HIS 107 Colonization, Colonialism and Independence
HIS 238 Canada to 1885: Creating a Nation
HIS 248 American History to 1877
HIS 265 Asia: Foundations and Modern Nations
HIS 275 Ancient Greece and Rome
HIS 277 Mediaeval Europe, 400-1350
HIS 279 Europe, 1715-1870
HIS 338 Canada since 1885: Defining a Nation
HIS 348 American History from 1877
HIS 377 Europe, 1350-1715
HIS 379 Europe, 1870-Present
HIS 461 Cradle of Civilization: Ancient Near East
HIS 462 Introduction to the Islamic World
HIS 490 International Relations from 1945
Any two HST courses (numbers between HST100 and HST499).
In the total degree, a maximum of four liberal studies HST courses may be substituted for HIS courses.
LIBERAL STUDIES: Two courses from Table A.
PROFESSIONALLY RELATED: One course from Table I, Table III, Table IV (History), or Table IV (Sociology)
Neither HIS nor SOC courses may be taken to satisfy Professionally Related requirements.

5th & 6th Semester

Begins 2021-2022.
REQUIRED:
HIS 505 Locating the Past: Archival Research
SOC 475 Contemporary Sociological Theory
SOC 481 Survey Design and Analysis
REQUIRED GROUP 1: One of the following
HIS 500 History and New Media
HIS 501 Archaeology and Material Culture
HIS 502 Life Stories: Oral History
HIS 755 Themes in Material Culture
REQUIRED GROUP 2: One of the following
SOC 482 Advanced Methods of Media Analysis
SOC 483 Advanced Statistical Analysis
REQUIRED GROUP 3: One course from the following:
SOC 300 Sociology of Equity and Diversity
SOC 420 Social Class in Changing Times
SOC 525 Media and Images of Inequality
SOC 608 Women, Power and Change
PROFESSIONAL: Two History courses from Table II
UPPER LIBERAL STUDIES: Two courses from Table B

7th & 8th Semester
Begins 2022-2023.
REQUIRED:
SOC 490 Capstone: Specializing Your Knowledge
SOC 427 Indigenous Perspectives on Canada
REQUIRED GROUP 1: One of the following:
HIS 902 Thesis Course
HIS 903 Senior Seminar I: Cross-Field Study
HIS 916 Senior Seminar II: Science, Technology and Medicine
HIS 931 Senior Seminar III: Americas
HIS 956 Senior Seminar IV: Africa
HIS 957 Senior Seminar V: Middle East
HIS 958 Senior Seminar VI: Asia
HIS 976 Senior Seminar VII: Europe
HIS 990 Senior Seminar VIII: International Relations
PROFESSIONAL: Three **History** courses from Table II
PROFESSIONAL: Two **Sociology** courses from **Table II**
UPPER LIBERAL STUDIES: Two courses from Table B

History and Sociology Double Major - Professional Table II

History: A total of **five HIS courses** must be taken in total.
HST courses (numbered between HST 500-899) may be substituted.
In the total degree, a maximum of four (4) liberal studies HST courses may be substituted for HIS courses.
HIS 500 History and New Media
HIS 501 Archaeology and Material Culture
HIS 502 Life Stories: Oral History
HIS 510 Museology and Public History
HIS 541 Canada and the First World War
HIS 556 Colonial Africa
HIS 559 Ancient Egypt
HIS 561 The Ottoman Empire

HIS 590 Modern International Relations
HIS 594 War to War: World Conflict, 1900-45
HIS 610 Curating the Past
HIS 615 Film, Television and 20th C History
HIS 656 Post-Colonial Africa
HIS 661 The Middle East from 1908
HIS 662 The Mughal Empire, 1526-1764
HIS 677 Society in the High Middle Ages, 1000-1500
HIS 678 The Renaissance in Europe
HIS 683 Victorian Britain
HIS 696 The History of Terrorism
HIS 710 Museum and Heritage Management
HIS 742 Canadian Cultural Industries
HIS 755 Themes in Material Culture
HIS 762 The Making of Modern South Asia, 1757-1947
HIS 783 20th-Century Britain
HIS 790 Modern Germany
HIS 826 Science and World Exploration
HIS 828 Science, Corporations and the Environment
HIS 845 Canada in the International Sphere
HIS 854 African-American History
HIS 886 The British Empire and the World
HIS 898 A History of International Organizations
HIS 900 Experiential Learning I
HIS 901 Experiential Learning II

Sociology: A minimum of **two SOC courses** must be taken

A maximum of two (2) courses, marked with a dagger (†), can be used toward Table II requirements.

SOC 300** Sociology of Equity and Diversity
SOC 302 The City and Society
SOC 319 Sociological Perspectives on Crime
SOC 402 The City and Social Problems
SOC 420** Social Class in Changing Times
SOC 472 At Work in a Changing World
SOC 474 Immigration, Borders and Belonging
SOC 476 Sociology of Fear
SOC 477 Sociology of Advertising
SOC 478 Sociology of Fun
SOC 479 Social Networks and the World Wide Web
SOC 491* Independent Senior Research Project
SOC 500 Youth and Society
SOC 502 Violence and the Family
SOC 503† Sociology of Education
SOC 504 Children and Society
SOC 505† Sociology of Sport
SOC 506† Health and Society
SOC 530 Blackness and Freedom
SOC 595 Women and Aging
SOC 603† Sociology of Gender
SOC 605 Families: Difference and Diversity
SOC 606 Work and Families in the 21st Century
SOC 608** Women, Power and Change
SOC 609 Women and Human Rights
SOC 611 Future Worlds: Technology and Social Change
SOC 633† Sex, Gender Identities and Sexualities
SOC 700 Men and Masculinities in the 21st Century
SOC 702† Anatomy of Human Conflict

SOC 703† Women, Power and the Global South
SOC 704† Aging, Culture and Society
SOC 705† Law and Justice
SOC 706 Globalized Labour and Consumption
SOC 707† Religion, Meaning and Power
SOC 708 Environmental Sociology
SOC 801† Global Power Relations
SOC 802† Issues in War and Peace
SOC 803 International Community Engagement
SOC 808† Sociology of Food and Eating
SOC 885† Women in Islam
SOC 902† Hollywood and Society
SOC 903 Action Cinema and Modernity
SOC 904 Women in Popular Culture
SOC 931 Waste and Consumerism
SOC 932 The Entertainment Industry
SOC 941 Colonialism and Racialization
SOC 942 Women and Structural Change
SOC 943 Poverty Issues
* Departmental approval required.
** If not previously selected.

Calendar Format for Double Major in Politics and Governance and Sociology

Admissions Information

Applicants interested in the double major program in Politics and Governance and Sociology must apply for admission to one of the ten major programs (Criminology, English, Environment and Urban Sustainability, Geographic Analysis, History, Language and Intercultural Relations, Philosophy, Politics and Governance, Psychology or Sociology), or to Undeclared Arts. Students are not admitted directly to a double major.
The Faculty of Arts accepts applications for transfer to a double major program in the second semester of studies. Approved transfer students commence studies in the double major program in second year. Further details on the process will be provided by the Faculty of Arts during first semester.

Bachelor of Arts (Double Major, Politics and Governance and Sociology)

1st & 2nd Semester
Begins 2020-2021.
REQUIRED:
POG 100 People, Power, Politics
POG 110 Power and Influence in Canadian Politics
SOC 105 Introduction to Sociology
SOC 107 Sociology of the Everyday
SSH 105 Critical Thinking I
SSH 205 Academic Writing and Research
REQUIRED GROUP 1: Two courses from Table I (Humanities)
PROFESSIONALLY RELATED: One course from Table I or Table III.
PROFESSIONALLY RELATED: One course from Table III.

3rd & 4th Semester
Begins 2020-2021.
REQUIRED GROUP 2: One of the following pairs (two courses):

POG 230 Statistics and Social Sciences
And one course selected from **Sociology** **Table II**

OR
SOC 411 Introduction to Quantitative Data Analysis
And one course selected from **Politics** **Table II**

REQUIRED GROUP 3:
SOC 470 Toronto: The Changing City
SOC 473 Classical Sociological Theory
SSH 301 Research Design and Qualitative Methods
REQUIRED GROUP 4: Two courses from the following
POG 210 Power and Authority in Canada
POG 214 Controversial Policy Topics
POG 225 Global Governance
POG 235 Western Political Thought
POG 240 Intro to Comparative Politics
LIBERAL STUDIES: Two courses from Table A.
PROFESSIONALLY RELATED: One course from Table I, Table III, Table IV (Politics and Governance), or Table IV (Sociology)
Course selection must not include courses with a POG or SOC course code.

5th & 6th Semester
Begins 2021-2022.
REQUIRED:
SOC 475 Contemporary Sociological Theory
SOC 481 Survey Design and Analysis
REQUIRED GROUP 1: One of the following
SOC 482 Advanced Methods of Media Analysis
SOC 483 Advanced Statistical Analysis

REQUIRED GROUP 2: One course from the following:
SOC 300 Sociology of Equity and Diversity
SOC 420 Social Class in Changing Times
SOC 525 Media and Images of Inequality
SOC 608 Women, Power and Change
PROFESSIONAL: Four **Politics** courses from **Table II** *
UPPER LIBERAL STUDIES: Two courses from Table B

7th & 8th Semester
Begins 2022-2023
REQUIRED:
SOC 490 Capstone : Specializing Your Knowledge
SOC 427 Indigenous Perspectives on Canada
PROFESSIONAL: Four **Politics** courses from **Table II** *
PROFESSIONAL: Two **Sociology** courses from **Table II**
UPPER LIBERAL STUDIES: Two courses from Table B
* of the total number of POG Table II electives required, a minimum of three must be completed at the 400-level

Politics and Governance and Sociology Double Major - Professional Table II
Politics and Governance: **A minimum of eight POG courses** must be taken, at least 3 of which must be at the 400-level
Sociology: **A minimum of two SOC courses** must be taken.
Politics and Governance:
Canadian

POG 210 Power and Authority in Canada
POG 310 Provincial Politics
POG 313 The Politics of Race and Ethnicity
POG 315 Equity and Human Rights in Canada
POG 410 Canadian Urban Politics
POG 416 The Politics of Canadian Federalism
POG 417 Canadian-American Relations

Policy

POG 214 Controversial Policy Topics
POG 316 Social Policy
POG 317 Education Politics and Policy
POG 411 Canadian Foreign Policy
POG 412 Government and the Economy
POG 415 Environmental Politics and Policy

Global

POG 225 Global Governance
POG 323 The Politics of International Development
POG 324 Global Political Economy
POG 423 Nationalism and Identity
POG 424 Human Rights and Global Politics
POG 425 Regional Economic and Political Integration
POG 426 Global Conflict and Peace
POG 427 Women, War, and Peace

Comparative

POG240 Intro to Comparative Politics
POG 440 Indigenous Governance/Justice
POG 442 Women and Comparative Politics
POG 443 Global Cities
POG 444 Politics, Media and Technology
POG 446 Voters, Elections, and Parties

Theory

POG 235 Western Political Thought
POG 320 Social Identity and Citizenship
POG 430 Contemporary Political Thought
POG 431 Power, Domination and Resistance

Unclassified

INP 900 Understanding the Nonprofit Sector
POG 490 Politics and Governance Topics
POG 498 Directed Research in Politics
POG 499 Field Experience

NOTE: With advance written approval of the Department, Public Administration (PPA) courses may be substituted for Table II Professional courses at an equivalent level.

With advance written approval of the Department, Upper Level Politics (POL) liberal studies courses may be substituted for Table II Professional courses at the 300-level (i.e., POG 300 - 399).

Sociology:

A maximum of two (2) courses, marked with a dagger (†), can be used toward Table II requirements.

SOC 300** Sociology of Equity and Diversity
SOC 302 The City and Society
SOC 319 Sociological Perspectives on Crime
SOC 402 The City and Social Problems
SOC 420** Social Class in Changing Times
SOC 472 At Work in a Changing World
SOC 474 Immigration, Borders and Belonging
SOC 476 Sociology of Fear
SOC 477 Sociology of Advertising
SOC 478 Sociology of Fun

SOC 479	Social Networks and the World Wide Web
SOC 491*	Independent Senior Research Project
SOC 500	Youth and Society
SOC 502	Violence and the Family
SOC 503†	Sociology of Education
SOC 504	Children and Society
SOC 505†	Sociology of Sport
SOC 506†	Health and Society
SOC 530	Blackness and Freedom
SOC 595	Women and Aging
SOC 603†	Sociology of Gender
SOC 605	Families: Difference and Diversity
SOC 606	Work and Families in the 21st Century
SOC 608**	Women, Power and Change
SOC 609	Women and Human Rights
SOC 611	Future Worlds: Technology and Social Change
SOC 633†	Sex, Gender Identities and Sexualities
SOC 700	Men and Masculinities in the 21st Century
SOC 702†	Anatomy of Human Conflict
SOC 703†	Women, Power and the Global South
SOC 704†	Aging, Culture and Society
SOC 705†	Law and Justice
SOC 706	Globalized Labour and Consumption
SOC 707†	Religion, Meaning and Power
SOC 708	Environmental Sociology
SOC 801†	Global Power Relations
SOC 802†	Issues in War and Peace
SOC 803	International Community Engagement
SOC 808†	Sociology of Food and Eating
SOC 885†	Women in Islam
SOC 902†	Hollywood and Society
SOC 903	Action Cinema and Modernity
SOC 904	Women in Popular Culture
SOC 931	Waste and Consumerism
SOC 932	The Entertainment Industry
SOC 941	Colonialism and Racialization
SOC 942	Women and Structural Change
SOC 943	Poverty Issues

* Departmental approval required.
** If not previously selected.

Degree Designations - The degree designations for the proposed degrees will be:
- Bachelor of Arts, Criminology and History Double Major
- Bachelor of Arts, Criminology and Politics and Governance Double Major
- Bachelor of Arts, Criminology and Sociology Double Major
- Bachelor of Arts, History and Politics and Governance Double Major
- Bachelor of Arts, History and Sociology Double Major
- Bachelor of Arts, Politics and Governance and Sociology Double Major

Implementation - The six new Double Major combinations (CRM-HIS, CRM-POG, CRM-SOC, HIS-POG, HIS-SOC, POG-SOC) will be implemented in Fall 2020, pending Senate approval (and contingent on the completion of the program build in SAS prior to the March 2020 course intention period). Students admitted in or before Fall 2019, would have the opportunity to apply, in February 2020, to transfer to one of the six new Double Major combinations for the Fall term of their second year of studies commencing Fall 2020. The

cohort of students who are admitted into one of the Arts common platform programs in Fall 2020 and later would have the opportunity to apply to transfer to one of the six new Double Major combinations for the Fall term of their second year of studies.

Recommendation
Having satisfied itself of the merit of this proposal, the Academic Standards Committee recommends: *That Senate approve the new double majors in the Faculty of Arts: Politics and Governance-Criminology; Politics and Governance-History; Politics and Governance-Sociology; Criminology-History; Criminology-Sociology; History-Sociology.*

E. FACULTY OF COMMUNITY SERVICES - Modifications to the Collaborative Nursing program
The Collaborative Nursing Program has undertaken a major curriculum modification in response to accreditation recommendations, gaps identified in our recent Periodic Program Review (PRR), students' identified learning needs, emerging societal trends, and identified gaps in content areas necessary for success in the nursing licensing exam. The curriculum revisions will be implemented in September 2020, pending final institutional approvals. The Collaborative Curriculum Redevelopment Steering Committee, established to provide overall guidance to the development process, has facilitated communication and coordination of activities across the three partnering sites, as well as the Office of the Registrar and the University Planning office. Consultations have occurred with all impacted Schools and Departments across the university.

Main Curricular Changes and Rationale - The four main changes are outlined below.

1. Modified Program Learning Outcomes - The previous program learning outcomes were redeveloped to be relevant to current and anticipatory shifts in healthcare and new requirements for nursing registration and practice, and are presented below:

Existing Learning Outcomes (as of 2012)	Mapping to New LOs
1. Demonstrates caring as it relates to self and others.	LO1d LO1e LO1f
2. Determines meaning and significance in patient encounters.	LO1c
3. Establishes meaningful connections with clients to facilitate therapeutic interactions.	LO1c LO3a
4. Collaborates with clients and colleagues to ensure consistent, safe, effective care.	LO3b LO3c LO9a
5. Uses personal knowledge and theory from nursing and related disciplines to determine an appropriate course of nursing actions.	LO6
6. Demonstrates reflective, critical, and analytical thinking to inform a creative and flexible nursing practice.	LO2b
7. Appraises research studies and critically utilizes the findings as a basis for nursing practice.	LO2a
8. Evaluates gaps in nursing knowledge and appropriate solutions to address them. Considers research possibilities, and participates in research activities where appropriate.	LO2a
9. Analyses health and practice issues within the social/economic, political/global environment.	LO6
10. Practices nursing in a skillful, therapeutic, socially inclusive, and culturally sensitive manner.	LO4a LO4b LO4c

11. Provides leadership within his/her own practice to facilitate clients' and colleagues' desired outcomes.	LO8a
12. Interprets population health principles to plan, implement, and evaluate health promotion and disease prevention programs.	LO6
13. Works within the context of a multidisciplinary health care team to apply primary health care principles.	LO3b LO3c
14. Participates in developing and implementing strategies for the improvement of the health environment through the use of the political process and the principles of social justice and equity, within an individual/community/global context.	LO6
15. Practices nursing within legal, ethical and professional guidelines; behavior is consistent with academic integrity and social responsibility.	LO5
16. Is an active participant in his/her personal and professional development.	LO9b
17. Demonstrates the ability to communicate information, arguments, and analyses accurately and reliably, orally and in writing to a range of audiences.	L01a L01b

Proposed Learning Outcomes		
Communication	LO1a	Applies clear and accurate verbal communication
	LO1b	Applies clear and accurate written communication
	LO1c	Applies principles and processes of relational practice and effective communication with individuals
	LO1d	Applies principles and processes of relational practice and effective communication with families
	LO1e	Applies principles and processes of relational practice and effective communication with groups
	LO1f	Applies principles and processes of relational practice and effective communication with communities.
Application of evidence-informed knowledge & care	LO2a	Applies broad knowledge base in nursing and other disciplines in the provision of evidence-informed care.
	LO2b	Applies critical reasoning in decision-making and delivery of care
Inter/Intra professional care	LO3a	Collaborates with clients, in supporting the achievement of health outcomes.
	LO3b	Collaborates with inter-professional members, in supporting the achievement of health outcomes.
	LO3c	Collaborates with unregulated health care providers and other staff as a health care team in supporting the achievement of health outcomes.
Culturally safe/sensitive practice	LO4a	Implements culturally safe and competent care to address the health needs of diverse individuals.
	LO4b	Implements culturally safe and competent care to address the health needs of diverse families.
	LO4c	Implements culturally safe and competent care to address the health needs of diverse communities.
Ethical and Legal practice	LO5	Demonstrates ethical practice, professional responsibility and accountability to clients and organizations within all domains of nursing practice.
Strategies & Interventions	LO6	Plans effective interventions to manage care within health systems.
Technology	LO7	Incorporates information and communication technologies, and digital tools to support the delivery of client care that meets evidence informed, organizational, ethical, regulatory and legislative requirements.

Leadership & Advocacy	LO8a	Demonstrates effective leadership in practice and facilitates change and innovation across practice situations and settings.
	LO8b	Demonstrates effective advocacy in practice and facilitates change and innovation across practice situations and settings.
Safety	LO9a	Contributes to a culture of safety in the provision of quality healthcare.
	LO9b	Identifies limits to own knowledge and ability in the provision of safe quality healthcare.

2. Courses that have been deleted or added - Responding to recommendations from CASN for increased emphasis on gerontology, and in order to address gaps in preparing students for the NCLEX (e.g. gaps related to content on mental health, maternal/child health, pediatrics, and pathotherapeutics), incorporating **core nursing courses** that address these content areas was a key priority for curriculum modification. The new courses include and emphasize this required knowledge: *1) A first year nursing communication course; 2) A second year microbiology course; 3) A third year mental health course; 4) A third year maternal/child health and pediatrics course; and 5) A fourth year advanced pathotherapeutics course*. Given these courses were required to be added to the curriculum, the following five courses have been deleted in the proposed curriculum: *FNN111 (Introduction to Nutrition), SOC104 (Understanding Society), PHL302 (Ethics and Health Care), PSY302 (Child Development)* and *PSY402 (Adult Development).* Relevant content from these courses has been integrated into our proposed core nursing courses to ensure that key concepts are covered through a nursing lens. Course deletions primarily occurred in the first and second years of the program, in an effort to respond to feedback from students and the Peer Review Team regarding the exceptionally heavy workload in these years.

3. Integrated Foundational Theoretical Courses (PPNs) - To achieve better integration of knowledge across the curriculum, foundational theoretical courses called *Professional Practice in Nursing* (PPN) courses are proposed in each semester, to help ensure integration, application, and leveling of theoretical knowledge across the four years of the program.

4. Integrated Professionally-Related Nursing Electives - In the existing curriculum, students take one of seven professionally-related nursing elective courses. These courses are now integrated across the redeveloped curriculum, either through content integration or the addition of a course, as follows:

Professional Elective (Existing Curriculum)	Type of Modification in the Proposed Curriculum
NUR 820 *Gerontological & Geriatric Nursing*	Integrated in courses across the curriculum (e.g., PPN102 *Professional Practice in Nursing 2: Health, Wellness, and the Role of the Nurse;* PPN201 *Professional Practice in Nursing 3: Living with Chronic Illness*)
NUR 823 *Adult Health*	Added as a course in the proposed curriculum with modifications (PAT401: *Advanced Pathotherapeutics*)
NUR 825 *Family Health*	Integrated in courses across the curriculum (e.g. PPN201 *Professional Practice in Nursing 3: Living with Chronic Illness*; PPN 301 *Professional Practice in Nursing 5: Promoting Maternal and Child Health*)
NUR 827 *End of Life Care*	Integrated in courses across the curriculum (e.g. PPN 202 *Professional Practice in Nursing 4: Experiencing Acute and Life-Threatening Illness;* PPN301 *Professional Practice in Nursing 5: Promoting Maternal and Child Health*)
NUR 824 *Women's Health*	Integrated in courses across the curriculum (e.g. PPN 301 *Professional Practice in Nursing 5: Promoting Maternal and Child Health;* PPN 3012 *Professional Practice in Nursing 6: Promoting Community Health*)
NUR 826 *Community Mental Health.*	Added as a course in the proposed curriculum with modifications (PPN 303: *Professional Practice in Nursing 7: Promoting Mental Health*)
NUR 828 *Global Health*	Content included in PPN 302 *Professional Practice in Nursing 6: Promoting Community Health*)

Comparison of Existing Curriculum to the Proposed Curriculum

Existing Curriculum				Proposed Curriculum		
Semester	**Courses**	**Core/ Elective**	**Status**	**Courses**	**Core/ Elective**	**Status**
Semester 1	**7 courses in total** **Weekly hourly totals** **Class total: 17 hours** **Lab total: 4 hours**			**6 courses in total** **Weekly hourly totals** **Class total: 16 hours** **Lab total: 2 hours**		
	Theoretical Foundations of Nursing NSE11A Class: 3 hours	Core	Integrated	PPN 101 Professional Practice in Nursing 1: Introduction to the Nursing Profession Class: 3 hours	Core	Added (integrated content)
	Assessment of the Healthy Individual NSE13A Class: 1 hour Lab: 2 hours	Core	Integrated	NSE 111 Foundations for Nursing Practice Class: 1 hour Lab: 2 hours	Core	Modified and renamed (integrated content)
	Nursing Practice 1 NSE12A Class: 1 hour Lab: 2 hours	Core	Integrated	BLG 101 Anatomy and Physiology 1 Class: 3 hours	Core	Separated into 2 one-semester courses
	Anatomy and Physiology BLG10A Class: 3 hours	Core	Separated into 2 one-semester courses	NSE 101 Communication for the Nursing Professional Class: 3 hours	Core	Added (integrated content)
	Nutrition FNN111 Class: 3 hours	Core	Deleted-key content Integrated	PSY 102 Introduction to Psychology I Class: 3 hours	Core	Unchanged
	Introduction to Psychology I PSY102 Class: 3 hours	Core	Unchanged	Liberal Studies (LLL) Class: 3 hours	Liberal Studies	Unchanged
	Elective – LLL Class: 3 hours	Liberal Studies	Unchanged			
Semester 2	**6 courses** **Weekly hourly totals** **Class total: 14 hours** **Lab total: 4 hours** **Clinical total: 5 hours**			**5 courses** **Weekly hourly totals** **Class total: 11 hours** **Lab total: 2 hours** **Clinical total: 4 hours**		
	Theoretical Foundations of Nursing NSE11B Class: 3 hours	Core	Integrated	PPN 102 Professional Practice in Nursing 2: Health, Wellness, and the Role of the Nurse Class: 3 hours	Core	Added (Integrated content)
	Assessment of the Healthy Individual NSE13B Class: 1 hour Lab: 2 hours	Core	Integrated	NSE 103 Introduction to Health Assessment Class: 2 hours Lab: 2 hours	Core	Modified
	Nursing Practice 1	Core	Integrated	NSE 121	Core	Modified

	NSE12B Class: 1 hour Lab: 2 hours Clinical: 5 hours/week for 5 weeks (replaces class & lab)				Clinical Practice I Clinical: 8 hours every other week starting in Week One		
	Anatomy and Physiology BLG10B Class: 3 hours	Core	Separated into 2 one-semester courses		BLG 111 Anatomy and Physiology 2 Class: 3 hours	Core	Separated into 2 one-semester courses
	Social, Political & Economic Perspectives NSE112 Class: 3 hours	Core	Integrated		Liberal Studies (LLL) Class: 3 hours	Liberal studies	Moved
	Child Development PSY302 Class: 3 hours	Core	Deleted-key content integrated				
Semester 3	**6 courses** **Weekly hourly totals** **Class total: 18** **Lab total: 3** **Clinical total: 8**				**5 courses** **Weekly hourly totals** **Class total: 12 hours** **Lab total: 4 hours** **Clinical total: 12 hours**		
	Concepts, Individual and Family NSE21A Class: 3 hours	Core	Integrated		PPN 201 Professional Practice in Nursing 3: Living with Chronic Illness Class: 3 hours	Core	Added (integrated content)
	Nursing Implications PAT20A Class: 3 hours	Core	Separated into 2 one-semester courses		NSE 203 Advanced Health Assessment Class: 2 hours Lab: 2 hours	Core	Added (Integrated content)
	Nursing Practice 2 NSE22A Class: 3 hour Lab: 3 hours Clinical: 8 hours	Core	Integrated		NSE 211 Clinical Practice II Class: 1 hour Lab total: 2 hours Clinical total: 12 hours	Core	Modified
	Research Design, Measurement & Applications NUR80A Class: 3 hours	Core	Separated into 2 one-semester courses		PAT 201 Pathotherapeutics 1 Class: 3 hours	Core	Separated into 2 one-semester courses
	Adult development PSY402 Class: 3 hours	Core	Deleted-key content integrated		NSE 212 Quantitative Methods, Design and Statistical Analysis in Nursing Research Class: 3 hours	Core	Separated into 2 one-semester courses
	Elective – LLL Class: 3 hours	Liberal Studies	Unchanged				
Semester 4	**6 courses** **Weekly hourly totals** **Class total: 15**				**6 courses** **Weekly hourly totals** **Class total: 16**		

	Clinical total: 14				**Lab total: 2** **Clinical total: 12**		
	Concepts, Individual and Family NSE21B Class: 3 hours	Core	Integrated		PPN 202 Professional Practice in Nursing 4: Experiencing Acute and Life-Threatening Illness Class: 3 hours	Core	Added (Integrated content)
	Nursing Implications PAT20B Class: 3 hours	Core	Separated into 2 one-semester courses		BLG 131 Microbiology for Nursing Class: 3 hours	Core	Added
	Nursing Practice 2 NSE22B Clinical: 14 hours	Core	Integrated		NSE 221 Clinical Practice III Class: 1 hour Clinical: 12 hours Lab: 2 hours	Core	Modified
	Research Design, Measurement & Applications NUR80B Class: 3 hours	Core	Separated into 2 one-semester courses		PAT 202 Pathotherapeutics 2 Class: 3 hours	Core	Separated into 2 one-semester courses
	Understanding Society SOC104 Class: 3 hours	Core	Deleted –key content integrated		NSE222 Qualitative Methods, Design and Analysis in Nursing Research Class: 3 hours	Core	Separated into 2 one-semester courses
	Elective – LLL Class: 3 hours	Liberal Studies	Unchanged		Liberal Studies (LLL) Class: 3 hours	Liberal Studies	Unchanged
Semester 5	**5 courses** **Weekly hourly totals** **Class total: 12 hours** **Clinical total: 15 hours**				**5 courses** **Weekly hourly totals** **Lecture total:13 hours** **Clinical total: 14 hours**		
	Community Health Nursing NSE31A Class: 3 hours	Core	Integrated		PPN 301 Professional Practice in Nursing 5: Promoting Maternal and Child Health Class: 3 hours	Core	Added (integrated content)
	Nursing Practice 3 NSE32A Clinical: 15 hours	Core	Unchanged		NSE 311 Clinical Practice IV Class: 1 hour Clinical: 14 hours	Core	Unchanged
	Professionally Related Elective Class: 3 hours	Elective	Unchanged		Liberal Studies (ULL) Class: 3 hours	Elective	Unchanged
	Ethics and Health Care PHL302 Class: 3 hours	Core	Deleted-key content integrated		Open Elective Class: 3 hours	Elective	Unchanged
	Elective – ULL Class: 3 hours	Elective	Unchanged		Open Elective Class: 3 hours	Elective	Added
Semester 6	**5 courses** **Weekly hourly totals** **Class total: 12 hours** **Clinical total: 15 hours**				**5 courses** **Weekly hourly totals** **Class total: 13 hours** **Clinical total: 15 hours**		

	Community Health Nursing NSE31B Theory 3 Class: 3 hours	Core	Integrated		PPN 302 Professional Practice in Nursing 6: Promoting Community Health Class: 3 hours	Core	Modified
	Leadership and Change NSE306 Class: 3 hours	Core	Integrated		PPN 303 Professional Practice in Nursing 7: Promoting Mental Health Class: 3 hours	Core	Added
	Nursing Practice 3 NSE32B Clinical: 15 hours	Core	Unchanged		NSE 321 Clinical Practice V Class: 1 hour Clinical: 14 hours	Core	Unchanged
	Professionally Related Elective Lec = 3 hours	Elective	Unchanged		Liberal Studies (ULL) Class: 3 hours	Elective	Unchanged
	Elective – ULL Lec: 3 hours	Elective	Unchanged		Open Elective Class: 3 hours	Elective	Unchanged
					Open Elective Class: 3 hours	Elective	Added
Semester 7	**4 courses** **Weekly hourly totals** **Class total: 9 hours** **Clinical total: 16 hours**				**5 courses** **Weekly hourly totals** **Class total: 13** **Clinical total: 23**		
	Professional Issues and Trends NSE407 Class: 3 hours	Core	Integrated		PPN 401 Professional Practice in Nursing 8: Transition to the Profession, Leadership and Change Class: 3 hours	Core	Added (integrated content)
	Nursing Practice 4 NSE417 Clinical: 16 hours	Core	Integrated		NSE 411 Clinical Practice VI Class: 1 hour Clinical: 23 hours GPA weight of 2	Core	Modified
	Professionally Related Elective Class: 3 hours	Elective			PAT 401 Advanced Pathotherapeutics Class: 3 hours	Core	Added (integrated content)
	Elective – ULL Class: 3 hours	Elective	Unchanged		Liberal Studies (ULL) Class: 3 hours	Elective	Unchanged
Semester 8	**3 courses** **Weekly hourly total** **Class total: 3 hours** **Clinical total: 32 hours**				**2 courses** **Weekly hourly total** **Class total: 4 hours** **Clinical total: 35 hours**		
	Professional Nursing Elective Class: 3 hours	Elective			PPN 402 Professional Practice in Nursing 9: Preparation for Independent Practice Class: 3 hours	Core	Added (integrated content)
	Nursing Practice 5 NSE418 Clinical: 32 hours	Core	Integrated		NSE 421 Clinical Practice VII Class: 1 hour` Clinical: 35 hours GPA weight of 3		Modified

Professional Electives: NUR 820 Gerontological & Geriatric Nursing NUR 823 Adult Health NUR 824 Women's Health NUR 825 Family Health NUR 826 Community Mental Health NUR 827 End of Life Care NUR 828 Global Health	Deleted (key content integrated throughout the curriculum)			

Pre/Co-requisite Structure - The revised curriculum is structured as semester-based versus year-long, to allow for better flexibility in transitions, and for increased student success, as outlined below:

Course Title	Prerequisite Courses	Co-requisite Courses
PPN 101		NSE 111, NSE 101, BLG 101
BLG 101		PPN 101, NSE 111, NSE 101
NSE 101		PPN 101, NSE 111, BLG 101
NSE 111		PPN 101, BLG 101, NSE 101
PPN 102	PPN 101, NSE 111, NSE 101	NSE 103, NSE 121
NSE 103	PPN 101, NSE 111, NSE 101	PPN 102, NSE 121
BLG 111	PPN 101, NSE 111, NSE 101, BLG 101	No co-requisites
NSE 121	PPN 101, NSE 111, NSE 101	PPN 102, NSE 103,
PPN 201	PPN 102, NSE 103, BLG 111, NSE 121	NSE 203, NSE 211, PAT 201, NSE 212
NSE 203	PPN 102, NSE 103, BLG 111, NSE 121	PPN 201, NSE 211, PAT 201, NSE 212
NSE 211	PPN 102, NSE 103, BLG 111, NSE 121	PPN 201, NSE 203, PAT 201, NSE 212
PAT 201	PPN 102, NSE 103, BLG 111, NSE 121	PPN 201, NSE 203, NSE 211, NSE 212
NSE 212	PPN 102, NSE 103, BLG 111, NSE 121	PPN 201, NSE 203, NSE 211, PAT 201
PPN 202	PPN 201, NSE 203, NSE 211, PAT 201, NSE 212	BLG 131, NSE 221, PAT 202, NSE 222
BLG 131	PPN 201, NSE 203, NSE 211, PAT 201, NSE 212	PPN 202, NSE 221, PAT 202, NSE 222
NSE 221	PPN 201, NSE 203, NSE 211, PAT 201, NSE 212	PPN 202, BLG 131, PAT 202, NSE 222
PAT 202	PPN 201, NSE 203, NSE 211, PAT 201, NSE 212	PPN 202, BLG 131, NSE 221, NSE 222
NSE222	PPN 201, NSE 203, NSE 211, PAT 201, NSE 212	PPN 202, BLG 131, NSE 221, PAT 202
PPN 301	PPN 202, BLG 131, NSE 221, PAT 202, NSE222	NSE 311
NSE 311	PPN 202, BLG 131, NSE 221, PAT 202, NSE222	PPN 301
PPN 302	PPN 202, BLG 131, NSE 221, PAT 202, NSE222	NSE 321, PPN 303
NSE 321	PPN 202, BLG 131, NSE 221, PAT 202, NSE222	PPN 302, PPN 303
PPN 303	PPN 202, BLG 131, NSE 221, PAT 202, NSE222	PPN 302, NSE 321
PPN 401	PPN 302, NSE 321, PPN 303, PPN 301, NSE311	NSE 411, PAT 401
NSE 411	PPN 302, NSE 321, PPN 303, PPN301 NSE311	PPN 401, PAT 401
PAT 401	PPN 302, NSE 321, PPN 303, PPN301, NSE311	NSE 411, PAT 401
PPN 402	PPN 401, NSE 411, PAT 401	NSE 421
NSE 421	PPN 401, NSE 411, PAT 401	PPN 402

New and Amended Courses in Calendar Format

PPN 101: Introduction to the Nursing Profession
Weekly Contact: 3 hours, 1 term
Course count: 1
Billing Units: 1
GPA weight: 1
Course Description
An exploration of self and the nursing profession in the context of health care. The historical, political, economic and gendered context of nursing is examined. Ethical and legal aspects of nursing are explored. Presents a comprehensive understanding of the nursing profession and relational practice

NSE 101: Communication for the Nsg Professional
Weekly Contact: 3 hours, 1 term
Course count: 1
Billing Units: 1
GPA weight: 1
Course Description
Explores communication within the context of professional nursing practice. Develops a range of skills to effectively communicate including both scholarly writing and communication with clients, families, and the interprofessional team. Significance of therapeutic communication for relational practice is addressed. Health history interviewing is practiced using a relational practice approach.

BLG 101: Anatomy and Physiology 1
Weekly Contact*:* 3 hours, 1 term
Course count: 1
Billing Units: 1
GPA weight: 1
Course Description
A comprehensive investigation into the cells and tissues of the human body. Specific content will include homeostasis and how it is maintained in the healthy human body. An exploration of cellular physiology and the nucleus as the control center of the cell sets the stage for the semester. Following this, an investigation into the four primary tissues of the body (epithelium tissue, connective tissue; muscle tissue, and nervous tissue), and the basics of the nervous system.

NSE 111: Foundations for Nursing Practice
Weekly Contact: 1 hour. class, 1 term + 2 hour lab, 1 term
Course count: 1
Billing Units: 1
GPA weight: 1
Course Description
Foundational nursing skills and interventions will be introduced and practiced in the class, clinical lab and simulation lab setting. Student will develop skills to assist clients with activities of daily living and utilize principles of infection control. Nursing psychomotor skills and interventions will be considered within the context of the nursing process and client centered care. This course provides the basis for future nursing practice within a healthcare setting.

PPN 102: Health, Wellness and the Role of Nurse
Weekly Contact: 3 hours, 1 term
Course count: 1
Billing Units: 1
GPA weight: 1
Course Description
Health and wellness are discussed within the context of nursing theories, nursing process, and social determinants of health. Relational practice with diverse clients is explored. Introduction to the role of the RN in an inter-professional team. Formal and informal caregiving roles are examined.

NSE 121: Clinical Practice I
Weekly Contact: 8 hours every other week (=4 hours clinical per week), 1 term
Course count:1
Billing Units: 1
GPA weight: 1

Course Description
This course introduces the student to the profession of nursing as a practice discipline. Students develop their understanding of the role of the nurse within the inter-professional team. In the clinical setting, students apply caring, communication, critical thinking and foundational nursing skills to maintain and support clients' health and well-being.

NSE 103: Introduction to Health Assessment
Weekly Contact: 2 hour class, 1 term; 2 hour lab, 1 term
Course count: 1
Billing Units: 1
GPA weight: 1
Course Description
Establish the foundation of theoretical and practical assessment of individuals' health and wellness across the lifespan. Health assessment skills are practiced using relational, ethical, and trauma-informed approaches. Knowledge of Indigenous peoples and other culturally-diverse groups are integrated into health assessment practice.

BLG 111: Anatomy and Physiology 2
Weekly Contact: 3 hours, 1 term
Course count: 1
Billing Units: 1
GPA weight: 1
Course Description
A comprehensive investigation into the major organ systems of the body. Specific content will include: cardiovascular (blood, heart and blood vessels), respiratory, gastrointestinal including nutrition, urinary including fluid/electrolyte and acid/base balance, reproduction and pregnancy including heredity.

PPN 201: Living with Chronic Illness
Weekly Contact: 3 hours, 1 term
Course count: 1
Billing Units: 1
GPA weight: 1
Course Description
A relational practice perspective underlies the exploration of adults and older adults living with chronic illness. An examination of chronic illness trajectory, family systems and client empowerment is undertaken. Inter-professional considerations and the impact of digital health related to management and support of chronic illness are explored.

NSE 203: Advanced Health Assessment
Weekly Contact: 2 hour class, 1 term + 2 hour lab, 1 term
Course count: 1
Billing Units: 1
GPA weight: 1
Course Description
Advanced understanding of theoretical and practical health assessment across the lifespan. Critical thinking and clinical decision-making in the assessment of multiple body systems related to complex clients. Nursing interventions planned and individualized to clients based on systematic assessments. Assessment skills are practiced using relational, ethical, and trauma-informed approaches. Integrate knowledge of Indigenous peoples and other culturally-diverse groups into health assessment practices.

NSE 211: Clinical Practice II

Weekly Contact: 1 hour class,1 term + 12 hours clinical, 1 term + 2 hours lab, 1 term
Course count: 1
Billing Units: 2
GPA weight: 1
Course Description
Students integrate theoretical approaches and critical thinking to collaborate with individuals and families to provide safe, therapeutic, culturally sensitive and ethical care in diverse, adult and older adult client populations. Opportunities are provided for the acquisition of psychosocial and psychomotor skills in class, lab and simulation. Clinical practice and simulation facilitate application of the skills.

PAT 201: Pathotherapeutics 1
Weekly Contact: 3 hours, 1 term
Course count: 1
Billing Units: 1
GPA weight: 1
Course Description
An exploration of core pathotherapeutic concepts is undertaken and applied to selected health conditions among diverse adult populations. Principles of pharmacokinetics, pharmacodynamics and pharmacogenetics are discussed with an emphasis on how they are affected by health conditions. Drug classifications and specific drugs are discussed. Inter-professional management of conditions supported by evidence-informed guidelines is incorporated.

NSE 212: Nursing Research: Quantitative Methods
Weekly Contact: 3 hours, 1 term
Course count: 1
Billing Units: 1
GPA weight: 1
Course Description
Introduction to the nursing research process. Methodologic and analytic approaches to quantitative nursing research with a focus on statistical analysis and the interpretation of quantitative data. The critical appraisal of quantitative studies promotes evidence-informed decision making and knowledge translation.

PPN 202: Acute and Life-Threatening Illness
Weekly Contact: 3 hours, 1 term
Course count: 1
Billing Units: 1
GPA weight: 1
Course Description
A relational practice perspective underlies the exploration of adults experiencing acute and/or life-threatening illnesses. Curative, rehabilitative and palliative actions are considered. An examination of health care systems related to acute illness is undertaken. Palliative care and end of life care are discussed.

BLG 131: Microbiology for Nursing
Weekly Contact: 3 hours, 1 term
Course count: 1
Billing Units: 1
GPA weight: 1
Course Description
This course will introduce the students to the fundamentals of microbiology. They will study bacteria, viruses, fungi and protozoans and their role in the acquisition and dissemination of infectious diseases. The students will also learn how microbial infections are controlled by hygiene, antimicrobial therapies and the immune system.

Infections of each of the body systems will be surveyed. The lecture material will be supplemented with case histories in order to simulate real world situations.

NSE 221: Clinical Practice III
Weekly Contact: 1 hour class, 1 term + 12 hours clinical, 1 term + 2 hours lab,1 term
Course count: 1
Billing Units: 2
GPA weight: 1
Course Description
Students integrate theoretical approaches and critical thinking to collaborate with clients, families and members of the health care team to provide safe, therapeutic, culturally sensitive, and ethical care to diverse adult clients and families. Opportunities are provided for the acquisition of increasingly complex psychosocial and psychomotor skills in class, lab and simulation. Clinical experiences and simulations will facilitate increased proficiency in nursing practice.

PAT 202: Pathotherapeutics 2
Weekly Contact: 3 hours, 1 term
Course count: 1
Billing Units: 1
GPA weight: 1
Course Description
Integration of core pathotherapeutic concepts support student learning, as increasingly complex and prevalent health conditions among diverse populations. Pharmacokinetics, pharmacodynamics and pharmacogenetics principals are applied to select drugs in the management of health conditions. Critical thinking and clinical decision-making are supported through integration of evidence-informed guidelines. Inter-professional management strategies are discussed

NSE222: Nursing Research: Qualitative Methods
Weekly Contact: 3 hours, 1 term
Course count: 1
Billing Units: 1
GPA weight: 1
Course Description
Phenomena are understood through the exploration of the qualitative research process. A focus is on qualitative inquiry from philosophical, methodological and analytical perspectives and critical appraisal of information and data informs knowledge for practice

PPN 301: Promoting Maternal and Child Health
Weekly Contact: 3 hours, 1 term
Course count: 1
Billing Units: 1
GPA weight: 1
Course Description
A critical social theoretical perspective underlies the exploration of family-centred maternal and child care, from pre-conception through adolescence. A focus on normal and high-risk pregnancy, labour/delivery, postpartum and paediatric nursing care is included. Current issues in maternal-child, paediatric and family health are explored.

NSE 311: Clinical Practice IV
Weekly Contact: 1 hour class (clinical conference), 1 term + 14 hours clinical, 1 term
Course count: 1
Billing Units: 2

GPA weight: 1
Course Description
Practice reflects the realities of community nursing in evolving, diverse social and health care environments, with an emphasis on prenatal, perinatal and child and adolescent family-centred care. A critical social theoretical perspective guides practice grounded in social justice, equity, determinants of health and relational practice. Students critically and reflexively draw on relevant standards and concepts to appraise and apply approaches and strategies that support community-based family-centred prenatal, perinatal and child and adolescent care.

PPN 302: Promoting Community Health
Weekly Contact: 3 hours, 1 term
Course count: 1
Billing Units: 1
GPA weight: 1
Course Description
A critical social theoretical perspective underlies the exploration of current and emerging issues affecting individuals, communities, and populations where they live, work and play. Using a social justice and equity lens and principles of primary health care, students critically and reflexively examine and apply community-nursing concepts to diverse populations, contexts and settings. Indigenous health is threaded throughout.

PPN 303: Promoting Mental Health
Weekly Contact: 3 hours, 1 term
Course count: 1
Billing Units: 1
GPA weight: 1
Course Description
A critical social theoretical perspective underlies the exploration of mental health, mental illness, addictions and mental health promotion for individuals, families and populations. Current and emerging societal issues and their influence on the understanding of and care for persons with mental health and addiction challenges are examined. Nursing interventions, scope of practice, inter-professional collaboration, and the broad legislative and ethical contexts shaping the provision of mental health services are integrated throughout.

NSE 321: Clinical Practice V
Weekly Contact: 1 hour class (clinical conference), 1 term + 14 hours clinical, 1 term
Course count: 1
Billing Units: 2
GPA weight: 1
Course Description
Practice reflects the realities of community nursing in a changing health care environment, with an emphasis on mental health. A critical social theoretical perspective guides practice grounded in social justice, equity, determinants of health and relational practice. Students critically and reflexively integrate community nursing standards and concepts to appraise and apply approaches and strategies that support client/community health.

PPN 401: Transition to the Profession
Weekly Contact: 3 hours, 1 term
Course count: 1
Billing Units: 1
GPA weight: 1
Course Description
Learners explore leadership competencies required to lead change and innovation within the context of an evolving profession and healthcare system. Learners use quality improvement methods and tools to promote

patient safety and quality care. Learners explore roles and responsibilities related to interprofessional practice.

NSE 411: Clinical Practice VI
Weekly Contact: 1 hour class (clinical conference), 1 term + 23 hours clinical, 1 term
Course count: 1
Billing Units: 3
GPA weight: 2
Course Description
The transition to professional practice includes increasing responsibility for the provision of care with clients and communities in a variety of settings in concert with the care of self and others. With the support and guidance of the preceptor and Faculty Advisor (Triad Model), learners integrate knowledge to provide increasingly complex care.

PAT 401: Advanced Pathotherapeutics
Weekly Contact: 3 hours, 1 term
Course count: 1
Billing Units: 1
GPA weight of 1
Course Description
Acute, life-threatening and traumatic conditions across the life span are examined. Integration of pathophysiological, pharmacokinetic, pharmacodynamic and nursing concepts support student learning. Students develop advanced assessment and clinical decision-making skills. Complex interventions are discussed. Interprofessional management through evidence-informed guidelines are explored.

PPN 402: Preparation for Independent Practice
Weekly Contact: 3 hours, 1 term
Course count: 1
Billing Units: 1
GPA weight: 1
Course Description
Preparation for independent practice establishes a foundation for transitioning into the Registered Nurse role with understanding of health discipline legislation and the College of Nurses of Ontario standards. Facilitates personal and professional leadership development, promotes healthy work environments and career planning. Promotes self-care practices to enhance resilience, manage relationships, and optimizes holistic care for self and others.

NSE 421: Clinical Practice VII
Weekly Contact: 1 hour class (clinical conference), 1 term + 35 hours clinical, 1 term
Course count: 2
Billing Units: 4
GPA weight: 3
Course Description
In preparation for registration, learners continue to expand professional practice with increasing independence to meet entry level competencies and professional standards. Learners engage in leadership practices to facilitate change and improve the healthcare system. Learners incorporate self-care practices to enhance resilience and optimize holistic care.

Academic Standing Variation – The approved academic standing variation (program and courses) for the existing curriculum will be incorporated into the proposed curriculum.
Resources required – The will be increased reliance on skills labs and simulation-based learning will require additional clinical lab staff who can supervise student learning in lab settings. The reduced number of courses offered in the proposed curriculum will have an impact on space resources in a positive way. As well, there will

be some understandable resource pressures on the Ryerson and college partners during the transition period. The addition of new courses and new approaches may also necessitate new acquisitions and resources in other areas of the university, such as the library.

Implementation Plan – Between September 2020 and April 2023, both the existing and new curriculum will be delivered simultaneously. The last cohort of the existing curriculum will graduate in June 2023. From then on all students will be in the redeveloped curriculum proposed herein. The program will work to ensure that there is an opportunity for any out-of-phase students to complete the program through appropriate course substitutions. During the transition period, careful planning and course management will be undertaken to ensure that students enrolled in both the existing and new curricula are appropriately guided and that the courses are delivered effectively and efficiently.

4-Year Phase-In Model

Cohort (Incoming Class)	2020-2021	2021-2022	2022-2023	2023-2024
2017-2018 ("old" curriculum)	**Fourth Year** Fall (7th Sem): NSE407, NSE417, Prof Related Elective Winter (8th Sem): NSE418, Prof Nursing Elective			
2018-2019 ("old" curriculum)	**Third Year** Fall (5th Sem): NSE31A, NSE32A, Prof Related, PHL302, Elective Winter (6th Sem): NSE31B, NSE32B, NSE306, Prof Related, Elective	**Fourth Year** Fall (7th Sem): NSE407, NSE417, Prof Related, Elective Winter (8th Sem): NSE418, Prof Nursing Elective		
2019-2020 (last cohort in "old" curriculum)	**Second Year** Fall (3rd Sem): NSE21A, NSE22A, PAT20A, NUR80A, PSY402, Elective Winter (4th Sem): NSE21B, NSE22B, PAT20B, NUR80B, SOC104, Elective	**Third Year** Fall (5th Sem): NSE31A, NSE32A, Prof Related, PHL302, Elective Winter (6th Sem): NSE31B, NSE32B, NSE306, Prof Related, Elective	**Fourth Year** Fall (7th Sem): NSE407, NSE417, Prof Related, Elective Winter (8th Sem): NSE418, Prof Nursing Elective	
2020-2021 (new curriculum)	**First Year** Fall (1st Sem): PPN 101, NSE 111, BLG 101, NSE 101, PSY 102, Elective-LLL Winter (2nd Sem): PPN 102, NSE 103, NSE 121, BLG 111, Elective-LLL	**Second Year** Fall (3rd Sem): PPN 201, NSE 203, NSE 211, PAT 201, NSE 212 Winter (4th Sem): PPN 202, BLG 131, NSE 221, PAT 202, NSE222, Elective - LLL	**Third Year** Fall (5th Sem): PPN 301, NSE 311, Elective-ULL, Elective-O, Elective-O Winter (6th Sem): PPN 302, PPN 303, NSE 321, Elective-ULL, Elective-O	**Fourth Year** Fall (7th Sem): PPN 401, NSE 411, PAT 401, Elective-ULL, Elective-O Winter (8th Sem): PPN 402, NSE 421

Recommendation
Having satisfied itself of the merit of this proposal, the Academic Standards Committee recommends: *That Senate approve the modifications to the Collaborative Nursing program.*

F. LIBERAL STUDIES – New course proposals
The Liberal Studies Curriculum Committee (LSCC) met on September 18, 2019 to review 10 new liberal studies course proposals. The committee voted in favour of recommending 9 of the course proposals. While the remaining proposal was not recommended for approval, feedback was provided to the originating department, and they were invited to revise and resubmit the proposal in the future. The ASC then reviewed the course proposals, including the one not recommended for approval, and upheld the recommendation of the LSCC. The courses recommended for inclusion in the Liberal Studies curriculum effective Fall 2020 are listed in the table below, along with their calendar descriptions and requisites, where appropriate.

Proposed New Liberal Studies Courses (with calendar descriptions)

Course Code	**Course Name** + Calendar Description
ARB300	**Principles in Arabic Writing** - This course is for learners with basic knowledge of Arabic, who have acquired the language informally, and who wish to develop their writing literacy skills for communication in formal contexts in Modern Standard Arabic. Focus is on vocabulary acquisition, mastery of grammar, written expression and various composition styles. Students will engage with a variety of authentic materials to develop writing, critical, analytical and interpretive skills which are applicable to professional paths. Upon successful completion of this course, students will take ARB 301. Prerequisite: The Arabic Placement Test, which can be accessed through the following link: https://www.ryerson.ca/llc/futurestudents/placement_tests/ (UL)
ASC120	**Introduction to Architecture** - This course introduces students to architecture as a cultural and intellectual undertaking, as well as a prime contributor to the design of our built world. Lectures, media presentations readings, assignments, and other explorations will provide students with opportunities to develop architectural vocabulary and an understanding of architectural concepts. Through such lenses and activities they will evolve insights into the theoretical, historical, economic, and technological aspects of architecture as they have evolved over time. (LL)
ASL101	**Introductory American Sign Language I** - This professional elective course is designed for hearing students wishing to acquire some of the basic vocabulary and grammatical structures of American Sign Language (ASL). Through active participation, students learn to communicate in ASL, developing their ability to understand and use ASL fingerspelling, simple affirmative and interrogative statements. Students also learn to converse in ASL. By the end of this course, students should know 500 signs. Students with restricted dexterity may find the production of signs challenging. (LL)
ASL201	**Introductory American Sign Language II** - This course is designed for hearing students with some basic knowledge of ASL who wish to acquire the necessary vocabulary and grammatical structures to conduct basic conversations in American Sign Language (ASL). Quantifiers and classifiers are covered, as are tense and number indicators. Verb inflections and adverb modulations are also explained. By the end of this course, students should know around 1000 signs. Students with restricted dexterity may find this course challenging. Prerequisite: ASL101 (LL)
ASL301	**Intermediate American Sign Language I** - This course is for hearing students with good knowledge of ASL wishing to develop their use of signed vocabulary and complex grammatical structures. The use of quantifiers is emphasized in describing objects and providing location. Verb inflections and adverb modulations are covered. By the end of this course, students should know 1500 signs and be able to conduct conversations involving several people, expressing emotions and feelings. Students with restricted dexterity may find this course challenging. Prerequisite: ASL201 (UL)
ASL401	**Intermediate American Sign Language II** - This course is for hearing students with good knowledge of ASL wishing to develop their use of signed vocabulary and complex grammatical structures. The use of quantifiers is emphasized in describing objects and providing location. Verb inflections and adverb modulations are covered. By the end of this course, students should know 1500 signs and be able to conduct conversations involving several people, expressing emotions and feelings. Students with restricted dexterity may find this course challenging. Prerequisite: ASL301 (UL)

BLG850	**What is Cancer?** - Cancer is the most prevalent disease in contemporary world. The basic biology of cancer as well as relevant clinical and therapeutic aspects of the disease will be covered. This knowledge will be then integrated with current public health issues in cancer prevention and treatment. Students will learn how to critically evaluate cancer claims in the news and explore common myths about cancer. Students will also have an opportunity to effectively communicate information about cancer to general public through current forms of media. This course is designed for non-science majors and as such does not require any university level science courses as prerequisites. Antirequisite: BMS850 (UL)
MUS220	**Global Popular Music** - This course will offer a survey of global popular music, investigating how the adoption of western music industry practices have been informed by new local contexts. The growth of diasporic fan bases and globalized movement of music via modern technology will be examined, alongside the impact of regional identities and political movements on music production. Examples from global popular music will be analyzed to illustrate both developments in musical style and music's connection to social change. (LL)
MUS520	**Women in Popular Music** - This course will examine the role of women in recorded popular music, looking at the interrelationships of gender identity, gender performance, and musical creation. How women have sought agency and independence within the western capitalist music industry model will be examined, using case studies of the lives and careers of female musicians. Examples from western popular music will be analyzed to illustrate the social, cultural, and political contexts that influence female participation in music. (UL)

Recommendation
Having satisfied itself of the merit of this proposal, the Academic Standards Committee recommends: *That Senate approve the 9 course proposals for addition to the Liberal Studies elective tables.*

G. *For Information*: PERIODIC PROGRAM REVIEW FOLLOW-UP REPORTS

i. GRAPHIC COMMUNICATIONS MANAGEMENT One-Year PPR Follow-up Report

This follow-up report addresses the recommendations stated in the Academic Standards Committee's assessment of the Periodic Program Review of the Bachelor of Technology, Graphic Communications Management, approved by Senate in April 2018.

Recommendation: The Academic Standards Committee recommends that the program provide a one-year follow-up report as follows:
1. Demonstrate progress on the developmental plan.
2. Provide feedback on how issues identified in the self study regarding the phased-out curriculum, as well as curricular enhancements regarding EDI, have been addressed in the revised curriculum that was implemented in the Fall 2015.

Response:
1. Demonstrate progress on the developmental plan.
Currency of Lab Equipment - The School has been very successful in keeping labs current. With the help of FCAD, software and hardware purchased have been consolidated, where possible. The FCAD Equipment Committee and GCM budget support lab currency. Gifts-in-kind to the School from industry, negotiated on a regular basis by GCM faculty members and staff, have been very important in allowing the School to maintain currency of labs.

Student Applicants - Incoming students, measured in terms of quality and number of applicants, have increased steadily and impressively through the Fall 2018 admission cohort. A full analysis of the Fall 2019 admissions cycle will be possible in Fall 2019, when reports from Undergraduate Admissions and Recruitment (UAR) are available.

SRC Space - Dedicated SRC space for faculty members has been addressed to an extent through the new FCAD Catalyst space in the Rogers Communications Centre (RCC). Additionally, the School has created a small SRC space in the Heidelberg Centre (HEI) by repurposing an office; this space is used primarily by faculty members and Research Assistants for measuring and analysis of print samples and data. GCM has no dedicated SRC labs due to space limitations; labs available for SRC are shared teaching-research labs which are normally heavily scheduled during the academic year.

Internationalization - GCM has continued to strengthen internationalization initiatives, in accordance with the Ryerson, FCAD and GCM strategic plans. In 2018-19, the School carried out a faculty exchange with partner university Hochschule der Medien (HdM), or *Stuttgart Media University,* in Stuttgart, Germany. Over the past two years, GCM has seen a significant increase in the number and quality of students seeking an international experience, and continues to work to provide short-term (typically one to two week) and semester-long international experiences.
GCM has held discussions to expand internationalization efforts to include Korean and other eastern partners in an effort to broaden the range of countries, cultures and economies which students may experience. The School is pleased that it is in the final stages of signing an international exchange agreement with Sungkyunkwan University in South Korea.
In Spring 2020, the School will arrange for two groups of students to attend Drupa and Interpack, the largest trade shows in the world for the printing and packaging industries, each event drawing around 300,000 global visitors.

Space Challenges - The major challenge identified in the PPR developmental plan was lack of space.
Two factors: the growth in the GCM student population to where the HEI building, designed for 400 GCM students is now home to 631 GCM students, plus an additional 590 non-GCM student enrolments per year in GCM courses, has put tremendous strain on space. The building is now some 60% over its design capacity. Labs are most affected, but dedicated space for SRC, adequate lecture facilities, space for extra-curricular student groups, and student study space are all stressors.
The School has done what it can: converting the GCM student lounge into a lab (following a referendum in which over 90% of voting GCM students supported the move), and adding two small group study spaces and over 60 power-equipped seats at tables in the hallways on the second and third floors of the HEI building. New student furniture for the main floor was purchased to replace aging and broken furniture from 2002. All of this was funded from the GCM budget.
GCM dedicates the board room in the HEI building as a student study space during exam periods. The School has engaged in unique timetabling, including a large number of evening classes, and the launching of six spring/summer courses in 2018, all of which help alleviate pressures on space, particularly labs.
The Dean assisted by providing two additional faculty offices in Kerr Hall South, and office space for the PMRC in the FCAD Catalyst research space in the RCC building. There has also been discussion about allocating space for GCM equipment within the new Creative Technologies Lab in the Daphne Cockwell Health Sciences Complex, and there was discussion in recent years about a shared wide format inkjet printing lab in the Image Arts (IMA) building. The Dean is cognizant of GCM's very significant space challenges, and is committed to searching for any significant additional space that may become available.

Implementation of New Curriculum - The new GCM curriculum, started in Fall 2015 and is now fully in place. One significant change is improved elective choice. Students now have access to four optional Concentrations, and more than 50% of students are choosing to complete a Concentration. Minors also remain highly popular with GCM students, and the number of elective courses in the GCM curriculum makes it possible for students to complete a large range of Minors without taking additional courses.

To effectively develop and deliver the new curriculum, GCM faculty and contract lecturers have uploaded and shared course outlines, content, resources and classroom materials into a shared faculty folder, and through a physical GCM teaching resources library. As part of this highly collaborative approach, at the end of each term the faculty meet to discuss content in all courses and update the shared resources. The goal of this process is to ensure that the curriculum is coherent, progressive and avoids unintended duplication.

Staffing (Faculty Members and Support Staff) - At the time of writing of the PPR, the School had five OPSEU support staff (three administrative staff and two technical staff). Since that time, the School hired a Client Support Technician. The main reason for the additional technical staff member is to support lab courses scheduled in the evenings until 9:30 p.m. and the growing number of students.
The developmental plan also established the goal of adding RFA faculty members. At the time of the PPR self-study, GCM had 11 RFA faculty and seven Contract Lecturers, two of whom worked full-time hours. Presently, the School has 11 RFA faculty and 14 Contract Lecturers, six of whom work full-time hours. In reality, the actual number of faculty members available for teaching, committee work, etc. is lower due to leaves. Presently, more than 50% of all teaching hours in GCM are taught by Contract Lecturers.
The need for additional RFA faculty members is greater now than it was at the time the PPR self-study was written; the Dean has provided significant hope that this will improve be the end of the 2019-20 academic year. The School is hopeful that GCM will be permitted to hire two RFA faculty members in 2019-20: one strategic growth hire and a retirement replacement, to replace the faculty member who retired in April 2019.
Assuming the above commitments are realized, this will bring the RFA complement to 13 faculty members by July 2020, barring any retirements or other unforeseen events.
Such hires will bring GCM closer to the FCAD student-faculty ratios, as well as improve GCM's strategic positions in priority areas such as packaging, design and typography, and SRC output. Additional RFA hires will reduce the portion of teaching done by CUPE Contract Lecturers below the 50% level. Hires offer the opportunity to improve the EDI profile of GCM faculty. Notably, at present, only 18% of GCM faculty members are female, while 75% of GCM students are female.

Resources Requested and Provided - The main resources requested by the School are physical space, especially lab space, office space and student space, as well as RFA tenure-stream faculty members and technical staff. These have been discussed above. Additionally, the PRT report recommended the School pursue a newer, more modern flexographic printing press. The School is currently investigating this possibility and has begun to set aside funds for this purpose. Industry has offered additional support. In the interim, thanks to financial support from the Dean's office, GCM is currently in the process of upgrading our existing flexo press.

2. Provide feedback on how issues identified in the self study regarding the phased-out curriculum, as well as curricular enhancements regarding EDI, have been addressed in the revised curriculum.
The phased-out curriculum is now concluded. The vast majority of students admitted prior to Fall 2015 graduated in Spring 2019. A few more will graduate in Fall 2019. Only nine (9) students enrolled under the phased-out curriculum will remain in the GCM program beyond the Fall 2019 convocation, and they are expected to graduate in 2020 or later. Of those nine, only six (6) still require GCM courses to graduate, the other three having only requirements for Liberal Studies, Professionally-Related Electives, or courses taught by other Schools and Departments.
One issue which the School is aware of is that two out-of-phase students will require the elective course GCM 812 in 2019-20 as a substitute for the phased-out required course GRA420. Because GCM 812 is an elective course, and despite the University's new budget challenges, it will be essential to offer GCM 812 for these students, or to find another appropriate solution in the event there is a requirement to cancel the GCM 812 elective course.
GCM is highly committed to EDI, both in curriculum and in other operations of the School. EDI is not only addressed directly through the curriculum; other opportunities include extra-curricular student groups and their activities, hires of faculty, staff and Teaching Assistants, interactions with industry and employers, SRC, events, meetings and conferences, publications and websites, emails and communication pieces, imagery, signage, etc.

However, the revised curriculum provides an excellent opportunity to advance EDI initiatives.
Recognizing that EDI concepts and best practices are ever-evolving, faculty (including Contract Lecturers) and staff discuss EDI initiatives in department meetings on a regular basis. Other opportunities to focus on EDI are presented through the initiatives of many other University offices, programs and groups – too many to mention – and with strong support from the Dean.
EDI is not something which is necessarily specific to certain courses; rather the School's commitment to, and demonstration and practice of EDI principles, is something which runs across the curriculum, not unlike critical thinking, literacy or academic integrity. Below is a list of some ways in which EDI is practiced within and across the GCM curriculum.

- The revised curriculum includes GCM 740 Accessibility for Graphic Communications, which is also offered as an Open Elective without prerequisites to students from across the University
- Accessibility as a topic is specifically covered in varying degrees in the following courses: GCM 110, GCM 111, GCM 130, GCM 230, GCM 210, GCM 362, GCM 720, GCM 722, GCM 754, GCM 800, and GCM 806
- EDI is not always a specific topic in other courses, but instructors do incorporate it into teaching across courses by:
    - Using gender neutral pronouns (their/they) instead of he/she in verbal and written scenarios and examples and gently addressing the topic in class when students use less-neutral pronouns or language
    - Avoiding assumptions about students and their families, including about nationality, origin, gender expression, sexuality, family status, etc.
    - Coaching guest speakers, industry visitors and employers on EDI expectations of the School
    - Applying tools in Microsoft Office 365 that create automatic tags for images that can be read by assistive devices
    - Using the captioning feature in YouTube and other video players to play videos with captions
    - Working with Student Learning Support (SLS) and Academic Accommodation Support (AAS) to support students whose diverse needs may include accessibility accommodations
    - Discussion of EDI-related labour and human rights codes in GCM 370 Management Studies, ahead of the third-year internship placement
    - Emphasizing that good graphic design, printing and packaging includes accessibility features
- Some things we can do in the future that can further enhance EDI in the classroom include advertising new faculty positions in outlets and channels which will enhance the EDI profile of the GCM faculty, and adding a statement to course outlines that reads something like: "The School of Graphic Communications Management supports a non-sexist, non-transphobic, non-homophobic, nonableist and non-racist environment and is committed to upholding the values of equity, diversity, and inclusion."

As a follow up to the Academic Standards Committee's review (October 2019), the program is required to provide to the ASC, by no later than June 30, 2020 as part of its two-year follow-up report, an update with the points related to EDI noted below to be addressed:
In general positive initiatives have been made with respect to EDI. To further progress, ACS encourages GCM to think more broadly beyond diversity of students/faculty/staff to include diverse ways of knowing/knowledges. In particular, please consider:
-how GCM might Indigenize and decolonize the curriculum through ways such as course redesign, rethinking pedagogical practices and adding authors/work that is reflective of Indigenous and post/anti colonial perspectives.
-bringing in guests presenters who speak to EDI issues and linking these presentations back into student assessments.
-how having more female faculty members will or could transform the program.

ii. **JOURNALISM One-Year PPR Follow-up Report**
This follow-up report addresses the recommendations stated in the Academic Standards Committee's assessment of the Periodic Program Review of the Bachelor of Journalism, Journalism, approved by Senate in April, 2018.

Recommendation: The Academic Standards Committee recommends that the program provide a one-year follow-up report that includes:
1. Progress on the developmental plan.
2. Feedback on how issues identified in the Self-Study regarding the phased-out curriculum have been addressed in the revised curriculum that was implemented in the Fall 2015.
3. Revised program learning outcomes and mapping of required and elective core courses in the current curriculum to the revised learning outcomes.
4. Evidence that efforts have been made to review and improve course outlines.
5. A complete set of CVs, removing any duplicates and adding ones that were missing in the PPR submission.

Response:
1. Progress on the developmental plan.
• Complete, as quickly as possible, the implementation of the new BJourn curriculum introduced Fall 2015
Completed. The first cohort of students graduated in June 2019.
• Track student progress in the new curriculum
a) We tracked our graduating students by conducting three focus groups in Week 10–11 of the Winter 2019 semester. All students surveyed said the new program was effective. Four-fifths of the respondents intended to pursue a career in journalism, while the remainder either were looking to law school or graduate school, or wanted to move into communications. Students highlighted the hands-on, experiential teaching, the excellence of the professors (there were some calls for more diversity in faculty), and the opportunity to network while in school. There was concern about repetition from class to class, year over year, although this was balanced by the understanding that repetition develops skill sets. There was some concern over having too many choices and not knowing the right path to take through the program; recent improvements to our academic advising process, discussed below, are intended in part to respond to this concern.
b) With the new curriculum, students now have five options for course "packages" (rather than three) in their seventh and eighth semesters. The program committee and faculty meeting discussions addressed how faculty would navigate the changed menu of offerings, the impact on delivery of each of the courses, and revision of course outlines and program learning outcomes to reflect the diversity of choices.
c) One of the significant curriculum changes is the options offered students in their final year. Data show that students are taking advantage of the flexibility offered under the new curriculum.
• Continue innovations through new curriculum-delivery modes, including asynchronous e-learning, interconnection between lecture and lab modes, and the development of new online and hybrid courses—beginning with online lectures for JRN 344 Journalism and Society.
Our Reporting on Indigenous Issues (JRN 350) is offered online. The online rollout of JRN 344 has been successful. In terms of the interconnection between lecture and lab modes, the most significant change for second-year classes was with JRN 272 Feature Writing and Current Affairs. In Winter 2019, the course format was a "flipped classroom," with a weekly two-hour lecture delivered via eLearning. In their four-hour weekly tutorials, students worked in small groups led by the tutorial leaders (experienced journalists) to do hands-on exercises and build major features, organized in relation to six featured neighbourhoods. We have also introduced online instruction modules for many other courses, particularly in the first year.
• Continue to develop curriculum that serves diverse student aspirations and makes the learning experience of marginalized groups, including Aboriginal students, as inclusive as possible. This will begin with implementation of the plan for raising understanding of Aboriginal People's issues and the challenges and opportunities for reporting their stories in a proper context.
The School has taken several steps to increase our students' awareness of and exposure to Indigenous issues. Here are a few examples: the core introductory course, JRN103, included a module in Fall 2018 on covering Indigenous issues, including a lecture by Distinguished Visiting Professor Duncan McCue, member of the Chippewas of Georgina Island First Nation in southern Ontario. Ryerson's Indigenous community were invited to class for a panel discussion about the controversy over the Egerton Ryerson statue. Students were then assigned to conduct interviews with the guests and write news stories. In JRN 270, students were assigned in Fall 2018 to

research, report and produce video, audio and online stories about Louis Riel Day in Toronto. In JRN 806, students responded in writing and discussed in class long-form Indigenous narratives by Tanya Talaga (2017), Dan David (1996; 1997) and Duncan McCue (2016). The School's Atkinson Lecture for 2018–19 was delivered by Ryan McMahon, an Anishinaabe comedian, writer, media maker for the *Globe & Mail*, Vice, CBC, CBC Aboriginal, APTN, and host of the podcast "Thunder Bay." Reporting on Indigenous Issues (JRN 350) is offered to students in their final undergraduate years. It responds directly to the TRC Calls to Action and ensures that students know the basics about the UN Declaration on the Rights of Indigenous Peoples, the history of residential schools, and the legal relationship between the federal government and Indigenous peoples. It also encourages students to report on science, education, health, political and other stories through an Indigenous lens, putting Indigenous voices first. The School has also made arrangements for students who report on stories in Indigenous communities to make an appropriate offering of tobacco.

• Make "learning journalism by doing innovative journalism for real audiences" more central to the second halves of the BJourn and MJ curricula. This includes developing sustainable plans for high-quality journalism, packaged and delivered innovatively, in all School publications

Stories produced by students in the third-year news reporting workshops are regularly published in the R*yersonian*, and students in lower level courses also have opportunities for publication in this way. The *Ryersonian* has expanded its mandate to cover the broader urban community around Ryerson, not just the campus. The *Ryerson Review of Journalism*, meanwhile, has evolved into a multi-platform news organization, with a vibrant online presence, a podcast, newsletter updates, and live events: https://rrj.ca/

• Articulate an enhanced "value proposition" of the BJourn degree that expresses the many benefits of training research on current events, critical thinking through verification and clarity of communication using multiple platforms. Work more consistently with other journalism schools and organizations to foster public awareness of what journalism is and its social importance as an impartial source of information for the public.

Two new final-year courses in particular have been valuable to students preparing for a broader range of career paths that can be pursued with a BJourn degree. The Capstone Project course (JRN 840) gives students the opportunity to conduct in-depth research in areas such as history, marketing, smartphone app development, etc. Building the Brand (JRN 842) has been an extremely popular fourth-year elective, preparing students to think in entrepreneurial ways about developing and managing their careers. The School has taken a leadership role in J-Schools Canada, an organization launched in late 2018 to promote the study, practice and reflection of journalism education in Canada and internationally through the World Journalism Education Congress; to strengthen the common purpose of Canadian journalism programs in providing quality education at the college and university level for future generations of Canadian journalists; and to operate as the official publishing body responsible for J-Source.

• Continue to grow News Studies enrolment, aided by a more robust "marketing" of these courses, through the new FCAD-wide focus on interdisciplinary learning and teaching, and by the already-apparent strong uptake of the Public Relations Minor by Professional Communication students.

Enrolment in NNS courses increased by more than 80 per cent between 2014–15 and 2018–19. Two new NNS courses—NNS410 (Queer Media) and NNS419 (Journalism in Comedy)— have been offered. The program has been marketed through advertising by developing marketing materials that were sent to all NNS students and distributed across campus, and through class visits. Fewer NNS courses were offered in 2018– 19, which accounts for the decline in registrations last year. The NNS courses also became an option for Creative Industries students to complete their minor. The majority of NNS students are from other FCAD schools.

• Work with FCAD development, administrative and academic colleagues to implement significant renovations to the School's second-floor spaces, as described in Part 7.2.3.

The opening of the Catalyst and Catalyst Learning Lab in September 2018 provided new instructional space for our radio and other courses. New edit suites were constructed in RCC 223. The Catalyst also provides office space for the Ryerson ism Research Centre (RJRC), space for public lectures organized by the RJRC and *Ryerson Review of Journalism*, and office space for a visiting professor from Doshisha University in Kyoto, Japan.

• Work with the Dean of, and colleagues in, FCAD to find more effective means of:
• responding to students' increasingly challenging mental-health and academic-accommodations needs,
• providing a consistently high quality of academic advising,
• advocating for the university to allocate more financial resources for essential student services, and
• designing a system that allows predictability and availability of elective course offerings.

RSJ has been the beneficiary of an FCAD faculty-wide initiative that saw the addition of a "SHaWN" (student health and well-being navigator) to help FCAD students facing personal and academic challenges identify and navigate the many supports available across the university. In addition, the School of Journalism's Student Affairs Coordinator visits all mandatory classes on a monthly basis in Years 1 & 2 to remind students about the kinds of support that are available. January, 2018 saw the launch of a new D2L site called Accommodating Accommodation, produced by RSJ instructor and technician Sally Goldberg Powell and FCAD Teaching Chair and RSJ professor Ann Rauhala, in consultation with the university's Academic Accommodation office. This course, which includes short videos and links to information, was designed specifically for instructors teaching in FCAD to better equip them to meet accommodation needs. More than 30 FCAD instructors have done the certificate. To date, more than 20 RSJ staff and faculty have completed Thrive RU resilience training led by Diana Brecher. ThriveRU newsletters are also sent out to students each week.

The School has introduced new processes to provide high-quality academic advising. Students fill out a Google form that asks them which areas they need help with. With the new process, all questions and inquiries are dealt with in a timely manner.

To better plan course offerings of core electives, Journalism holds in-class workshops to guide students through a specially designed "pre-course intentions" form to indicate their intentions for journalism electives. This process allows the School to better predict the demand for specific courses and adjust our offerings accordingly.

• Update our School's SRC policy to allow for the determination of priority areas for study and leverage funding opportunities to foster research in these areas

The School of Journalism adopted a new and updated SRC policy in September 2018.

• Continue planning and implement partnership with Journalists for Human Rights and Witwatersrand University to share values and techniques for journalism in Canada and sub-Saharan Africa, with a particular focus on entrepreneurial media ventures.

The partnership with RSJ and JHR is currently dormant. Prof. Asmaa Malik, who established this connection, continues to be the external reviewer for Witwatersrand's graduate-level Creating Media course and is working on a longer-term scholarly collaboration with Journalism and Media Lab Accelerator Program director Indra de Lanerolle. She is also in conversation with the South African Media Innovation Program to do some advisory work with their incubator teams.

2. Feedback on how issues identified in the Self-Study regarding the phased-out curriculum have been addressed in the revised curriculum that was implemented in the Fall 2015.

Issues arising out of old curriculum and responses to them include:

• It retained a print focus in the first year of the program that is inconsistent with current industry practice. In response, students now begin to work in multimedia journalism in the second semester. By the end of Year 1, students have reported using text, photos, video, audio and social media, doing all of this on daily deadlines.

• It delayed the introduction of digital reporting skills until the second year, thereby losing vital learning and practice time on what is now an essential set of skills. This is no longer the case—see above.

• It didn't provide enough student choice to accommodate an increasingly large number of our students who decide to pursue careers in different or related professions, including advanced academic study. Students now have much more choice about how to proceed through the program and are clearly taking advantage of these opportunities. Anecdotally, we see at least a half dozen students opting to pursue graduate studies each year.

• It didn't allow sufficient flexibility in modes of delivery, relying largely on small lab- style classes even where well-prepared lectures could provide a more consistent delivery of core knowledge. All first- and second-year courses are now offered in combined lecture/lab format, whereas as recently as 2014, virtually all first- and second-year courses were strictly labs.

• It didn't provide enough opportunity for students to prepare reporting assignments for publication to real audiences at an increasingly professional level of achievement. This point is addressed under "Progress on the developmental plan" above.

3. Revised program learning outcomes and mapping of required and elective core courses in the current curriculum to the revised learning outcomes.
In May 2018, the School of Journalism's undergraduate and graduate program committees embarked on a shared initiative to map our respective degrees' learning outcomes. We devoted a two-day retreat to a critical examination of our degree to come up with learning outcomes. We then sought advice from subject-matter experts in Ryerson's Learning and Teaching Office. LTO experts met with our senior leadership team and attended our half-day faculty and instructor conference in August 2018 to help our instructors match assessments to learning outcomes. We met again in the fall to review the work done at the May retreat. We now have draft degree-level learning outcomes that will be put to a faculty vote and, if passed, sent to School Council for approval in the Fall of 2019. We'll also help individual faculty and instructors craft learning outcomes for their individual courses; those LOs will be reviewed and, where necessary, edited, as part of the course syllabus approval process in advance of the Fall 2019 semester.

4. Evidence that efforts have been made to review and improve course outlines.
All faculty and instructors are required to submit their draft course outlines to designated faculty reviewers before each semester begins. In August 2018, faculty and instructors received a copy of the University Senate's guide to course outlines along with a template, annotated by the chair of the School of Journalism to reflect additional rules and policies that are specific to RSJ. Faculty and instructors also received a checklist that lists the most common errors and deficiencies we see in course outlines. That checklist was used to provide feedback to guide any required revision to a draft course outline.

5. A complete set of CVs, removing any duplicates and adding ones that were missing in the PPR submission.
These have been uploaded and shared with ASC.

iii. **POLITICS AND GOVERNANCE One-Year PPR Follow-up Report**
This follow-up report addresses the recommendations stated in the Academic Standards Committee's assessment of the Periodic Program Review of the Bachelor of Arts, Politics and Governance, approved by Senate in May 2018.

Recommendation: The Academic Standards Committee recommends that the program provide a one-year follow-up report that includes:
1. The progress on implementing the recommendations in the revised self-study.
2. A complete mapping of all required and elective courses to the current program learning outcomes (SSH required courses, POG 313, POG 315, POG 323, POG 235, INP 900, POG 240, and POG 430), as well as an analysis of the mapping, noting any current or future considerations for curriculum revisions.
3. Map teaching methods and assessments to the current program learning outcomes and provide an analysis of the mapping.
4. A complete set of course outlines for all core required and elective courses. (Course outlines for the following courses were missing: SSH 105, SSH 205, SSH 301, POG 225, and POG 320.)
5. Refined program learning outcomes to clarify the intent. Consider adding EDI as a program learning outcome.
6. The missing CVs of all RFA faculty teaching core required and core elective courses in the POG program.
7. An update on curriculum revisions, including considerations for Concentrations, Double Majors, and experiential learning opportunities.

Response:
1. The progress on implementing the recommendations in the revised self-study.

The Department outlined ten immediate priorities. Several of the immediate priorities will be taking place in Year 2, post-PPR (2019-2020), and relate to a review of the broader curriculum in the degree. The Undergraduate Program Director (UPD) and Chair, for example, announced at the September 5, 2019 Department meeting, that a Working Group on curriculum review will begin to meet in late September or October. The group will consist of all area group leads (sub-disciplines in the field) along with any other members interested in participating. The themes of each monthly meeting conform to the issues outlined in the Development Plan, including: course requirements; experiential learning; new course development to reflect student and faculty interests and recommendations in peer-review; Indigenizing curriculum; and imbedding seminars in curriculum. One of the 'intermediate priorities' – double majors – was moved to an 'immediate priority' owing to the opportunity that existed in the Faculty of Arts.
In the year following the POG-PPR, the Department Chair has endeavoured to discuss the challenges and opportunities of curriculum revisions regularly with Department members, and also provided more details about the course loading process with the Department. The goal has been to open up the 'black box' of course offering decisions with the Department, and to make the process more transparent while increasing Department-wide knowledge of the process. The expectation is that this will help advance an informed discussion of curriculum changes in the years to come. Finally, the Department is fortunate that the Department Chair and UPD have established a plan to make clear and meaningful advances in PPR implementation in 2019-2020.

2. A complete mapping of all required and elective courses to the current program learning outcomes (SSH required courses, POG 313, POG 315, POG 323, POG 235, INP 900, POG 240, and POG 430), as well as an analysis of the mapping, noting any current or future considerations for curriculum revisions.
The courses omitted from the original mapping are now included in the Google Drive. The addition of these courses to the course map does not change the analysis presented in the original PPR

3. Map teaching methods and assessments to the current program learning outcomes and provide an analysis of the mapping.
This table is now provided and available in the Google Drive folder. Results from the Table do not change the original analysis: Our department uses a range of teaching and assessment methods.

4. A complete set of course outlines for all core required and elective courses.
These outlines are now included and available in the Google Drive folder.

5. Refined program learning outcomes to clarify the intent. Consider adding EDI as a program learning outcome.
The Department has discussed the ASC's concerns with the overlap and lack of clarity of some of the learning outcomes, in particular, Learning Outcomes (LO) #7, #8, #9. The Department has not amended or changed these Learning Outcomes and is comfortable with leaving them as presented. The response to the ASC clarified our rationale for these LO. The bigger lesson from the ASC's observations and concerns is that the Department needs to think more carefully about how to communicate its learning outcomes as it moves forward with its program revisions and for the next program review. Added to this is the potential to formally imbed Equity, Diversity and Inclusion (EDI) qualities in the program's learning outcomes. The Department did not include EDI as a learning outcome, in part because EDI is both diffused throughout the program already, and because we have stand-alone required courses and electives that directly and specifically deal with EDI. Hence, a student cannot graduate from our POG program without reflecting on the relationship between EDI and politics. Our course, POG 320, Social Identity and Citizenship is required for students; students can further expand their knowledge by taking an elective in Indigenous governance; race and ethnicity; nationalism and identity; women in politics; and the politics of sexual diversity, to name a few courses. Hence, the Department has not revised the learning outcomes in the POG PPR to add a new LO relating to EDI. But the Department duly notes that this is central to the program and should add reference to EDI in its future program LO and in its next program review.

6. The missing CVs of all RFA faculty teaching core required and core elective courses in the POG program.
The CVs of all RFA faculty teaching core required and elective courses are now available in the Google Drive folder.

7. An update on curriculum revisions, including considerations for Concentrations, Double Majors, and experiential learning opportunities.
On June 28, 2019, the Faculty of Arts, Associate Dean, Undergraduate Studies, submitted a proposal for the creation of double majors to the Academic Standards Committee on behalf of the Departments of Sociology, Politics and Public Administration, Criminology and History. The double major proposal will provide an opportunity for incoming Politics and Governance students to apply for a double major with each of the other undergraduate programs listed. The Department endorsed this proposal and we are excited about the opportunities this proposal will afford new and early POG students. As previously noted, the double major proposal was originally part of our intermediate priorities in our development plan. However, the opportunity to submit the proposal arose earlier than anticipated so we dedicated a lot of time and effort to submitting this. A copy of the double major submission documents are available in the Google Drive folder. Other curriculum revisions that have been made include:
• requested a new stand-alone course code for our very popular Constituency Office class, which used to have a shared course code, and stating clearly that it is an experiential learning course;
• requested a new stand-alone course code for our popular Washington DC course, and stating clearly in the new description that this is an experiential learning course;
• added a stream to our curriculum entitled "Intensive Experiential Learning" where the two new stand-alone courses will fall under;
• discussing concentrations at a Spring 2019 department meeting, and drafting some potential concentrations that will be discussed as part of our Curriculum Working Group this year, 2019-2020;
• commitment to make increased experiential learning opportunities a central discussion item for the Curriculum Working Group in 2019-2020;
• attending an information session about introducing coop in the Faculty of Arts and a general endorsement of moving forward with the opportunity.

As a follow up to the Academic Standards Committee's review (October 2019), the ASC strongly encourages, as part of the next program review, the addition of a learning outcome related to EDI to enable formal demonstration of how it is embedded in the curriculum and to facilitate future program enhancement initiatives.

iv. **SOCIOLOGY One-Year PPR Follow-up Report**
This follow-up report addresses the recommendation stated in the Academic Standards Committee's assessment of the Periodic Program Review of the Bachelor of Arts, Sociology, approved by Senate in May 2018.

Recommendation: The Academic Standards Committee recommends that the program provide a one-year follow-up report that includes:
1. The progress on implementing the recommendations within the implementation plan.
2. Refinement of the program learning outcomes as a foundation for considering the curriculum modifications identified in the self study.

Response:
1. The progress on implementing the recommendations within the implementation plan.

- *Embed experiential learning further in curriculum and enhance student opportunities for professional*

development and career focus.

In the Winter 2018 term, Sociology students took part in the career-focused pilot course. This course was then offered for the first time as a credit course in Winter 2019 as SSH 500. This course was oriented around career goals and job search practices, helping students to develop a sense of direction and initiative through self-reflection, career search self-assessment, work on resumes, practice interviews and other activities. Students took part in a job shadow experience in an establishment aligned with their career goals, observing the work routines and having conversations with employees about the nature of the work, how jobs in the field are filled. The enrollment for the course was 26, 22 of whom were Sociology program students. This course will be offered again in the Winter 2020 term. Based on the positive student feedback, we expect the demand for this course to grow significantly in the coming years.

As we introduce new courses, particularly our new 4th year seminar courses, we are including specific language indicating experiential components. The work of embedding experiential learning into existing courses is ongoing. In addition, the Sociology Department has started to provide faculty members with additional resources to support the work of developing and implementing experiential learning components of a course. These funds have been used for additional TA hours and RA support, but may be used for other relevant needs. In 2018-19, four
faculty members accessed this support.

- *Deepen the transformative equity focus in the department by Indigenizing and decolonizing the Sociology Curriculum, increasing the variety of equity-oriented courses and strengthening processes for raising equity-oriented concerns in the department*

The work of Indigenizing and decolonizing the Sociology curriculum includes developments in course design, pedagogy and content. In the past year, Drs. Julie Tomiak and Damien Lee have met with the Curriculum Committee on two occasions to discuss possibilities related to Indigenous-focused course and program development. Based on these conversations, the Department Council approved an upper-year course entitled Special Topics in Indigenous Studies. While further curricular changes are planned, it was decided that these discussion should be postponed in order to include the perspectives of the three new Indigenous faculty members who will join the department on July 1, 2019. These faculty members bring knowledge and perspectives that will not only inform new course development, but will bring Indigenous perspectives into all aspects of the Sociology curriculum, including pilot projects in land or place-based pedagogy.

We are also developing more focussed and intensive equity-oriented courses to complement the broader and more introductory character of many of our courses in this area. Dr. Mélanie Knight developed a new course, called “Blackness and Freedom” (SOC 530). This course was approved in the Fall 2018 term, and will be taught in the Fall 2019 term. In addition, the department has undertaken discussions to develop additional sociology courses with an equity and decolonizing focus.

We also continue to support the Caribbean Studies courses. To support the Caribbean studies focus of the department, the department undertook a search for a Caribbean studies scholar. As this was a failed search, it is the expectation that the position will be re-posted this fall.

- *Provide program students with a wider variety of substantive courses covering exciting sociological topics*

To allow students greater variety of substantive courses, the Sociology Department has loosened its restriction on Sociology program students taking Liberal Studies sociology courses. Beginning in the Fall 2018 term, students are now permitted to take up to two upper-level Liberal Studies sociology courses, and count them as part of their

Table II requirements. This change has been met with widespread support from students, who are eager to have access to courses such as Sociology of Sport, Sociology of Food and Eating, and Women and Islam. A very small number of students have accidentally enrolled in more than two UL sociology courses. While these cases have been addressed individually, the Undergraduate Program Director and Undergraduate Program Administrator are developing strategies to help educate students about the restriction.

The department also continues to develop more elective courses offered as Table II courses. For example, SOC 530 (Blackness and Freedom) and the new Special Topics in Indigenous Studies courses will both be offered as Table II courses. In addition, the department is developing new courses as part of the revised 4th year curriculum (see below).

- *Smaller seminar courses offer the possibility of integrative learning in which students draw on their theoretical and methodological preparation to investigate pressing social issues through a sociological lens. We will explore possibilities for students to be exposed to more integrative learning through the exploration of substantive issues.*

The department has developed a proposal to modify the fourth year of the program by adding one additional required course. Specifically, students will take SOC 490 *and* one additional fourth year course. The additional required course will be selected from among 4 options. This additional required course will replace one of the required Table II courses, resulting in no change to the number of SOC courses that students require to complete their program. Each of the fourth-year course options would ideally be capped at 40 students, distinguishing these courses from other sociology electives.

The four options for the courses are: (1) Making Social Change; (2) Career Integration; (3) Current Social Issue Focus; and (4) Independent Sociological Analysis. Students who are interested in a traditional focused seminar course can take Current Social Issue Focus. Our students with a strong interest in social activism and social justice may elect to take Making Social Change. Students who are pursuing a career directly from their BA Sociology program will likely take an interest in the Career Integration course. Finally, students who wish to develop their own sociological analysis around a specific question or experience can fulfill their fourth year requirement through the Independent Sociological Analysis.

The Sociology Department Council approved this plan on April 9, 2019. We are now in the final stages of consultation on the plan for submission to the Academic Standards Committee by June 28, 2019.

- *The development of a graduate program in Transformative Social Research to enhance the research profile of the department and offer new forms of seminar-based learning for senior undergraduate students.*

Actions:
The Letter of Intent (LOI) for our proposed graduate program in Transformative Social Research has been approved. The next phase is for the Department to turn this into a full proposal ready to go through the stages of the formal approval process. The proposed program complements strengths of the undergraduate program, with its focus on experiential learning, effective research practices and equity. The goal will be to have the full proposal completed by the end of Fall 2019 so it can go through formal processes in Winter 2020. The Department will also have time for serious strategic discussions early in the Fall to address important issues raised by the UPO concerning access to resources for new programs.

2. Refinement of the program learning outcomes as a foundation for considering the curriculum modifications identified in the self study.

The program learning outcomes listed in the Sociology Periodic Program Review were formed through active collaboration and input by faculty and students in the department. The program reviewers stated "these learning outcomes are very clear while at the same time being quite detailed and specific". Further, they note that seven of the learning outcomes align with Ryerson's four principle priorities, and five of the learning outcomes align with the Faculty of Arts strategic plan. Finally, it is noted that the program requirements and learning outcomes encompass six Undergraduate Degree Level Expectations (UDLEs) for Ryerson University.

These learning outcomes remain central to the curricular changes and strategic priorities of the department, and are the foundation for changes made (or currently in progress). The changes outlined in this document have only strengthened the capacity of our program to address each of these learning outcomes. No further refinement of these learning outcomes is needed at this time.

v. **URBAN AND REGIONAL PLANNING One-Year PPR Follow-up Report**
This follow-up report addresses the recommendation stated in the Academic Standards Committee's assessment of the Periodic Program Review of the Bachelor of Urban and Regional Planning, Urban and Regional Planning, approved by Senate in March 2018.

Recommendation: The Academic Standards Committee recommends that the program provide a one-year follow-up report that includes:
1. An update on the initiatives outlined in the developmental plan.
2. A complete set of recent course outlines (dated) of all required and elective professional courses.
3. Up-to-date CVs (dated) of all RFA and CUPE instructors teaching required and elective courses in the program as of 2016-2017.
4. An update on any decisions made by the School regarding revising or deleting the academic standing variation that is outlined in the Ryerson Calendar.

Response:
1. An update on the initiatives outlined in the developmental plan.
The 2018-2019 academic year has been an extraordinarily active year in the School of Urban and Regional Planning. The School has had an Interim Director and an Interim Graduate Program Director since June 2018; significant faculty resources were committed to the first formal Program Review of the Graduate Program throughout the year; additional resources were committed to a search for a Tenure Track Position in Environmental Planning; two full-time faculty were on Sabbatical Leave; and much of the Winter Term was taken up by budget reduction planning requirements of the University. The cumulative impact of these activities has made it difficult to assign the highest priority to many of the short-term tasks identified in the Planning Periodic Program Review. Most of these short-term tasks have now started to be addressed and are 'on-track' following a robust end-of-year May Days 2019 set of faculty meetings and discussions.

- **Students and Alumni**

Goal - Provide greater support for university and other efforts to recruit secondary school students and promote urban planning as a field of study. Priority – Moderate.
Tasks - Consider changing admission requirements, such as mandatory high school courses or a portfolio if the number of applicants continues to grow at a sustained level and there is no academic standing rate improvement; Develop and grow minors in Urban Design, Real Estate, and other subjects to become attractors to the program; Focus on the program's differentiation strengths around studio teaching, as well as in subject areas of urban design, transportation planning, private development, environmental planning in order to attract high-quality allied-discipline applicants from other high demand programs across Ryerson.
Status – Medium Term/Ongoing.

Goal – Improve the School's Identity and Student Community. Priority – Moderate.

Tasks - Host additional RAPS meet and greets/events early in first year – **ACHIEVED/ONGOING;** Bring alumni to speak in first year classes on the strengths of the school and the importance of peer work, encourage student participation in events – **ACHIEVED/ONGOING;** Update website to include client-based studio activities – **ONGOING;** Invite alumni and community stakeholders to SURP lectures and other events – **ACHIEVED/ONGOING;** Link current student body and alumni together through specific events that feature alumni – **ACHIEVED/ONGOING.**
Status – Short Term/Ongoing.

Goal – Improve job-finding skills and opportunities. Priority – Moderate.
Tasks – Host additional RAPS meet and greets/events with alumni and employers in upper years of study– **ACHIEVED/ONGOING;** Support student ability to attend the annual alumni event; Continue to work with the Career Center to host employment finding seminars in fourth year; Expand Professional learning series from the fourth year to third year using our asset of experienced practitioners to increase employment and professional learning skills; Seek advice from the Advisory Council; Work with the Ontario Professional Planners Institute and the Canadian Institute of Planners to support their efforts to promote job recruitment and networking.
Status – Short Term/Ongoing.

- **Program Delivery:**

Goal – Incorporate a greater diversity of opinions and people in the classroom, particularly in terms of Human Rights and Indigenous People (duty to consult is required by law). Priority – High.
Tasks – Replacement hire needed for Prof. Altrows to address this gap in the curriculum – **ACHIEVED WITH HIRING OF DR. MAGDALENA UGARTE;** Include mandatory content in relevant core courses regarding human rights and indigenous perspectives; Facilitate projects, assignments and revised course content to focus on planning issues related to Diversity, Equity and Inclusion–**ONGOING;** Repurpose PLG700 capstone methods course as Human Rights and Planning to offer this content in tandem with planning ethics course (pilot tested in Fall 2016); Offer PLE765 International Development elective (Professor McCartney) – **ONGOING;** Offer elective or independent study elective in Aboriginal Planning & Indigenous Perspectives; Link field trip and field camps with elective courses and studios to directly work on projects with clients in communities, increase experiential learning in international and/or Indigenous communities.
Status – Short Term/Ongoing

Goal – Enhance the link between faculty SRC and student learning. Priority – Moderate.
Tasks –Make greater use of PLE775 Independent Study, especially as PLE806 is eliminated as an annual class loaded to one faculty member; Explore ways to reward faculty efforts to engage undergraduates in their SRC via Research Assistantships or other incentives for supervision and training of our students; Link elective and studio offerings to faculty SRC.
Status – Short Term/Ongoing.

Goal – Explore opportunities to increase hands-on "making and building", fabrication in the core curriculum; Explore additional professional contacts to increase Placement and Studio opportunities. Priority – Moderate.
Tasks – Introduce a DME / digital media experience boot camp and/or explore collaborations with similar platforms in FCAD, DAS where possible (short term); Consider shared modelling and fabrication lab space or moving into a faculty where those assets can be shared (long term); Establish studios as places for students to work on, securely store and display "made and built" materials; Plan and greet/social event hosted at SURP to explain placement program and benefits to prospective placement hosts; Create recruitment strategy for new placement hosts with Alumni and Partners; Work with Ryerson's Office of Cooperative Education to explore a formal co-op education program – **ACHIEVED/ONGOING.**
Status – Long & Short Term/Ongoing

Goal - Enhance the training, use, application and platform availability of technology; introduce specific technology-based learning as discrete and cumulative skills-based components of the program. Priority – High.

Tasks – PLG320, 420 and 520 to be restructured with significant technology components and requirements, similar to the technology module included as part of PLG220 and the AutoCAD components of PLG320; so that these core studios explore all of the technologies (e.g., GIS, AutoCad, Adobe Suite) through what they require of the students and tie these into "making and building" objectives related to data visualisation, graphic representation and 3D modelling (i.e. model making and building, both physical and digital); Encourage and provide funding for RAPS to offer software specific workshops with DME with peer-peer training support for current students (pilot tested in Fall 2016); Continue to offer GIS elective annually and work with faculty to develop an advanced AutoCAD Design and Infrastructure elective; Explore collaboration with DME and FCAD or DAS to offer a visual communication, graphic representation, GIS boot camp orientation course prior to fall term; Introduce visual communication content into lower year-courses as platform for growth while supporting PLAB and PLAD students through an advanced boot camp orientation course prior to fall term.
Status – Short Term/Ongoing

Goal – Enhance the training, use, application and platform availability of design-thinking into the core curriculum in ways that capitalize on existing and new faculty capacity for teaching and research related to design. Note that "design" as used here includes design of policy, landscape and built-form alike. Priority – High.
Tasks –Introduce design-thinking and visual communication curriculum content into first year planning studio and/or explore as a separate required 1st year course; Adapt all core studios to include design-thinking and visual communication curriculum content and build on this content throughout the program; Continue to offer GIS, Urban Design and Ecological Design electives annually and facilitate updated curriculum content in this context; work with faculty to develop an advanced Design-Thinking & Visual Communication elective; Build-on growing faculty expertise in research and teaching capacity for design-thinking content.
Status – Short Term/Ongoing

Goal – Offer official program specializations within the undergraduate program. Priority – High.
Tasks –Develop curriculum clusters with faculty– **ACHIEVED/ONGOING WITH THE FIRST 'TRANSPORTATION PLANNING' CLUSTER RECOGNITION FOR GRADUATING STUDENTS IN WINTER 2019;** Work to strengthen and develop Urban Design Minor (currently being developed with DAS and Interior Design), Real Estate Minor, and other relevant minors; Define nature of recognition for completing specialization; Undergo approvals process for integration specializations into curriculum; Clearly communicate specializations to students and the process for acquiring them when they are implemented; Implement additional courses required for the clusters (if needed); Ensure that electives are offered in a two-year rotation so that students can complete a cluster over a two-year term; Link to be developed between courses regarding Indigenous Planning and Economic Development to certificate programs at the Chang School.
Status – Medium Term/Ongoing.

Goal - Increase the number and breadth of PLE elective course offerings. Where funding becomes available to do so, consider open electives to facilitate cross-pollination of curriculum and collaborative potential. Priority – Moderate.
Tasks – Increase emphasis on the history of planning within core curriculum in lower years of the program– **ACHIEVED/ONGOING.**
Status – Short Term/Ongoing

Goal - Revise the entire research methods stream to ensure appropriate content and timing. Specifically, consider earlier introduction of research design course in which both qualitative and quantitative methods are considered in a multi-methodological context; consider adding a qualitative methods component into the upper stats course. This should address late timing in the delivery of research methods courses beginning only in upper years of the PLAN program curriculum. Priority – High.
Tasks – Re-evaluate the timing and delivery of research methods courses including both stats/quants courses (PLG 310 and 410) and PLG600 Research Design; Redirect PLG700 to Human Rights as mandated by law / planners' duty to consult (as per Diversity, Equity and Inclusion Focus); Allow students to pursue research

interests via PLE775 Independent Study as opposed to PLE806 due to consistently declining enrolment; Resolve issues arising from changes in timing of delivery of research methods courses as they relate to the PLAB/D curriculums.
Status – Short Term/Ongoing

Goal – Revise and optimize delivery of PLAB and PLAD programs. Priority – Moderate.
Tasks –Eliminate the former PLAD capstone individual research paper/project course PLG805 due to persistent inability of PLAD students to successfully complete; replace PLG805 with a liberal arts / English writing skills course in the first semester of the PLAD program to improve writing skills and address this recognised weakness among PLAD students; PLG420 to be substituted within PLAB program once PLG420 content is revised to address deficiency in visual communication, design-thinking and associated technical skills; requires resolution of scheduling and may shift course timing within the program; Renew agreements with PLAD feeder colleges (Fanshawe and Mohawk) contingent on the replacement of PLG805 with a writing skills class at the onset of the program.
Status – Medium Term/Ongoing

- **Faculty Development:**

Goal - Track and expand SRC activities. Priority – Moderate.
Tasks – Celebrate and promote faculty SRC: on the website, featured in weekly news banners, with links to new and merging faculty labs (Lister's Ecological Design Lab, Mitra & Sweet's TRANSform Lab, Robinson's Open Data Sandbox, McCartney's +CityLab and others); at the "front door" in hard copy and posters; on our website in the Ryerson News and FCS News whenever possible using an active communication strategy assisted by the Departmental Assistant; Begin measuring progress based on 2011 ACSP and allied disciplines' as well as FCS indicators annually; Improve communication of existing and growing faculty SRC; recognise the full range of venues and formats through which planning faculty publish and mobilize their peer-adjudicated SRC; research and professional organisations to include but are not limited to (e.g.) ACSP, AAG, APA, IFLA, CSLA, ASLA, OALA, OAA, CIP, AIA, and others; Celebrate and promote studios that feature SRC: where faculty SRC is explicitly linked to advanced planning studios in which student-faculty projects are outputs, these projects need to be enumerated and highlighted in a separate section on the SURP website (in addition to and cross-linked to faculty research labs, some of which already do this); Explore ways to provide greater support for faculty research via capital and infrastructure incentives and spaces for collaboration within and between these faculty labs; Incentivize faculty supervision of RAs, GAs, and undergraduate research; Continue to support FCS activities related to faculty grants, conference attendance, editorial support, writing circles, etc.
Status – Medium Term/Ongoing.

2. A complete set of recent course outlines (dated) of all required and elective professional courses.
Course outlines have been updated and included.

3. Up-to-date CVs (dated) of all RFA and CUPE instructors teaching required and elective courses in the program as of 2016-2017.
The CVs have been updated and included.

4. An update on any decisions made by the School regarding revising or deleting the academic standing variation that is outlined in the Ryerson Calendar.
The academic standing variation requiring that a second failed grade in any given course will lead to a REQUIRED TO WITHDRAW standing has now been removed.

Respectfully Submitted,

Kelly MacKay, Chair for the Committee

ASC Members:
Charmaine Hack, Registrar
Donna Bell, Secretary of Senate
Kelly MacKay, Chair and Vice-Provost Academic
Anita Jack-Davies, Office of the Vice President, Equity and Community Inclusion
Bettina West, Director, Curriculum Quality Assurance
Ann Marie Singh, Faculty of Arts, Criminology
Dale Smith, Faculty of Arts, English
Gavin Adamson, Faculty of Communication and Design, Journalism
Robert Clapperton, Faculty of Communication and Design, Professional Communication
Thomas Tenakate, Faculty of Community Services, Occupational & Public Health
Ian Young, Faculty of Community Services, Occupational & Public Health
Jurij Leshchyshyn, Faculty of Engineering & Architectural Science, Architectural Science
Donatus Oguamanam, Faculty of Engineering & Architectural Science, Mechanical & Industrial Engineering
Miranda Kirby, Faculty of Science, Physics
Foivos Xanthos, Faculty of Science, Mathematics
Horatio Morgan, Ted Rogers School of Management, Global Management
Mary Han, Ted Rogers School of Management, Entrepreneurship and Strategy
May Yan, Library
Linda Koechli, Chang School of Continuing Education
Dalia Hanna, Chang School of Continuing Education
Jacob Circo, Student
Fahim Khan, Student

Academic Governance and Policy Committee (AGPC)
Report #F2019-2 to Senate

1. Academic Governance and Policy Report - M. Benarroch

   1.1 Provost's Update

   1.2 Revisions to Senate Policy #2: Undergraduate Curriculum Structure – K. MacKay
   Motion: *That Senate approve the revisions to Senate Policy 2: Undergraduate Curriculum Structure*

   1.3 Revised Graduate Program Council Bylaws for the PhD in Policy Studies program – C. Searcy
   Motion: *That Senate approve the revised Graduate Program Council Bylaws for the PhD in Policy Studies program*

   1.4 Faculty of Law Council Bylaws – A. Saloojee
   Motion: *That Senate approve the Faculty of Law Council Bylaws*

   1.5 Modifications to Ryerson's examination and grading timelines – C. Hack
   Motion: *That Senate approve the modifications to Ryerson's examination and grading timelines*

Respectfully submitted,

M. Benarroch, Chair,
Provost and Vice-President, Academic

On behalf of the Committee:
K. MacKay, Vice-Provost, Academic
J. McMillen, Vice-Provost, Students
C. Hack, Registrar
D. Bell, Secretary of Senate
P. Moore, Faculty of Arts
R. Meldrum, Faculty of Community Services

N. Walton, Faculty of Community Services
S. Sabatinos, Faculty, Science
K. Kumar, Faculty, Faculty of Engineering & Architectural Science
R. Hudyma, Faculty, Ted Rogers School of Management
A. Mc.Williams, Senate Chairs' Representative
A.M. Brinsmead, Program Director, G. Raymond Chang School of Continuing Education
J. Spagnuolo, Undergraduate Student Senator
K. Nguyen, Undergraduate Student Senator
K. Park, Yeates School of Graduate Studies Student Senator

Revisions to Senate Policy #2: Undergraduate Curriculum Structure to facilitate inclusion of ASL courses as Liberal Studies and also modify word count requirements for language courses.

5.2.1.1.1 Program Department(s)/School(s) may prevent[6] their students from using courses that are too closely related to the content of core courses in their program;

5.2.1.1.2 Program Department(s)/School(s) may prevent[6] their students from using introductory level core elective courses; and/or

5.2.1.1.3 Teaching Department(s)/School(s) may prevent[6] enrolment in a specific course by permitting enrolment only of those students for whom it is a core required course (which may include students in their own program).

5.2.1.2 Students must meet all pre-requisite requirements.

5.2.1.3 Program Departments/Schools and Teaching Departments/Schools must negotiate, and agree upon, any restrictions that are applied. If the Program and Teaching Departments/Schools cannot agree, the matter will be referred to the Vice Provost Academic, who will decide operational matters and may refer academic matters to the Academic Standards Committee of Senate.

5.2.1.4 Restrictions on any other basis than those listed in 5.2.2.1 above require the approval of Senate on the recommendation of its Academic Standards Committee.

5.2.1.5 All restrictions should be based on sound and verifiable grounds including resource availability (including available teaching faculty), class size limitations (e.g. for studio and lab-based courses), and the presence of non-academic criteria (e.g. the submission of portfolios) within the program's admission requirements.

5.2.1.6 In order to maximize student choice of open electives among a wide range of subject areas, Teaching Departments/Schools in all Faculties have a responsibility to offer their courses as open electives to non-program students, within the limits posed by academic and fiscal responsibility and other constraints. Teaching Departments / Schools also have a responsibility to ensure an appropriate number of seats in their open electives courses.

5.3 Liberal Studies

5.3.1 Objectives

Liberal studies are intended, as a category, to develop students' capacity to understand and critically appraise the social, cultural, natural, and physical context in which they will work as a professional and live as an educated citizen. Liberal studies are also intended to develop skills in critical thinking, analysis, and written communication. Liberal studies courses, to the maximum degree feasible, provide a means by which students from a variety of programs may meet to share perspectives on the subject area being studied.

5.3.2 Regulations

5.3.2.1 Liberal studies are degree-level courses in disciplines outside students' core area(s) of study.

[6] "Prevent" includes, but is not restricted to, the application of restrictions, exclusions, or antirequisites.

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5.3.2.2 Students in all Ryerson programs, except those in the Faculty of Engineering and Architectural Science,[7] are required to complete at least six (6) liberal studies courses to fulfil the requirements of the liberal studies category.

5.3.2.3 Courses used to satisfy the requirements of the liberal studies category cannot simultaneously satisfy the requirements of any other category.

5.3.2.4 Liberal studies courses are offered at two levels, lower and upper.

5.3.2.4.1 Lower level liberal studies courses are intended for first- and second-year students. Normally, they will be introductory or survey courses.

5.3.2.4.2 Upper level liberal studies courses are more focus~~s~~ed and intellectually demanding, with the standards of evaluation reflecting those that should prevail at the advanced undergraduate degree level.

5.3.2.5 The number of liberal studies courses required at each level varies by program, but normally conforms to one of two patterns: three lower level and three upper level courses, or two lower level and four upper level courses. The choice of pattern, and the placement of the liberal studies course requirements within the program structure, are the responsibility of the Program Department/School. Students in any given program must complete the minimum number of upper level liberal studies courses prescribed by their program.

5.3.2.6 ~~All~~ Liberal studies courses must include a substantial writing component designed to foster critical thinking that[1]:

5.3.2.6.1 requires the student to carry out an analysis of the assignment's subject, and make and justify an evaluative, comparative or explicatory judgment;

5.3.2.6.2 **comprises one or more** individually-written assignment(s) that is/are completed out of class;

5.3.2.6.3 **totals at least** 1200 ~~1500~~ words at the lower level and **at least** 1500 ~~2000~~ words at the upper level; and[2]

5.3.2.6.4 has a **combined weight** of at least 25 ~~35~~% of the student's final grade in the course.

5.3.2.6.5 The quality of student work expected in the liberal studies writing component must reflect the level of the course.

5.3.2.6.6 The instructor is expected to provide commentary on the clarity of organization, logic, syntax, and grammar of student writing, and explicitly indicate that such attributes will form part of the basis upon which the assignment will be evaluated.

5.3.2.6.7 In addition to the mandatory writing component, liberal studies courses may include a variety of other methods of assessment (e.g., in-class, essay-type and multiple-choice testing, final examinations, field work, class presentation and debates, and

[1] In language courses where written discourse does not exist (such as languages that are primarily oral or signed), a non-written component must include a communication component that reflects the level of the course.

[2] Language courses with a written component must have a total range of **at least** 1000 words at the lower level and **at least** 1200 words at the upper level.

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assessments of student contributions to class discussion).

5.3.2.7 Upper level liberal studies courses may be substituted for lower level liberal studies requirements, but lower level liberal studies courses may not be substituted for upper level requirements.

5.3.2.8 Normally, there will be no restriction on the number of liberal studies courses a student may select from any one discipline.

5.3.2.9 Specific liberal studies courses, due to their close relation to a program's core studies, cannot be taken for liberal studies credit by students in that program.

5.3.2.10 Restrictions will normally be determined by the Liberal Studies Curriculum Committee (LSCC), but may be recommended by either Program or Teaching Departments/Schools. Between meetings of the LSCC, the Chair of the Committee may impose exclusions made necessary by curriculum modifications.

5.3.2.11 Program Departments/Schools may not prescribe, either directly or by prerequisite structure, specific liberal studies courses for credit in the liberal studies category.

5.3.2.12 The liberal studies curriculum, within the limits imposed by academic and fiscal responsibility, will maximize choice among a wide range of subject areas.

5.3.3 Guidelines for the Development of Liberal Studies Courses

The Liberal Studies Curriculum Committee (LSCC) will develop and maintain guidelines for the development of new liberal studies course proposals, and procedures for the submission and consideration of such proposals, and will publish the guidelines and procedures on an appropriate Ryerson website

PhD in Policy Studies, Bylaw changes to 7.1 and 7.5 approved by Policy Studies PhD Graduate Program Council, April 11, 2019

Rationale: The program was not able to have the Fall 2018 Graduate Program Council meeting due to lack of quorum. The Winter 2018 meeting went ahead without a quorum so no official action could be taken.

7. GPC Procedures

7.1. Normally the GPC will meet twice per year, once in each of the Fall and Winter semesters. Meetings will be scheduled to permit sufficient time for submissions to be made, and for information and/or approval, where applicable, to reach other committees and councils. Additional meetings may be held at the call of the GPC Chair, the Executive Committee, or at the request of any five (5) Council members.

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7.2. Notices of meetings will normally be distributed at least 5 days in advance.

7.3. Only faculty and student members of the GPC are voting members. Staff may serve on the GPC or its committees but are non-voting.

7.4. The Chair is entitled to vote on all questions coming before the GPC and/or any standing committee. In the event of a tie, the Chair has a second, 'casting,' vote.

7.5. Quorum is ten (10) members, and

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7.5.1. the majority of the members present must be faculty members of Council; and

7.5.2. at least two of the student members of Council must be present.

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7.6. Voting matters are normally decided by a simple majority of members present and voting at a meeting.

7.7. Decisions, including the election of committee members, may be taken outside meetings through ballots distributed electronically or physically to all members.

Yeates SCHOOL OF GRADUATE STUDIES

GRADUATE PROGRAM COUNCIL BYLAW

PhD in Policy Studies

Original Bylaw:

Approved by Interim Program Council: 31 October 2014

Approved by Dean, YSGS: 03 November 2014

Approved by YSGS Council: 10 November 2014

Approved by the Academic Governance and Policy Committee of Senate: 06 January 2015

Approved by Senate: 27 January 2015

Amendments:

Approved by Graduate Program Council: 11 April 2019

Approved by Dean, YSGS:

Approved by YSGS Council:

Approved by the Academic Governance and Policy Committee of Senate:

Approved by Senate:

1. Definitions

1.1. “Chair” means the Chair of the Graduate Program Council (GPC) of the Policy Studies program, as defined by this bylaw, unless otherwise stated.

1.2. “Council” or “GPC” means Graduate Program Council of the Policy Studies program, as defined by this bylaw, unless otherwise stated.

1.3. “Executive Committee” or “Executive” means the Executive Committee of the Policy Studies Graduate Program Council, as defined by this bylaw, unless otherwise stated.

1.4. “Dean of Record” is the Dean of the Faculty of Arts, with such duties and responsibilities as may be determined, from time to time, by Senate policy.

1.5. “Dean of YSGS” is the Dean of the Yeates School of Graduate Studies.

1.6. ”faculty” (lower-case “f”) means all faculty members (regular, adjunct, and affiliate) who are active in the program.

1.7. “Faculty” (upper case “F”) means an academic unit containing Departments/Schools.

1.8. “GPD” means Graduate Program Director of the Policy Studies program, as defined by this bylaw, unless otherwise stated.

1.9. “GPA” means Graduate Program Administrator, who provides administrative support to the Policy Studies program.

1.10. “graduate program” or “program” means the doctoral program in Policy Studies, housed in the Faculty of Arts at Ryerson University, unless otherwise stated.

1.11. “stream” or “field” means one of the areas of academic concentration available within the program.

1.12. ”graduate student” means a student who is enrolled in the Policy Studies program, who is in good academic standing.

1.13. “YSGS” means the Yeates School of Graduate Studies.

2. Mandate

Students and faculty are partners in ensuring the successful functioning of graduate programs at Ryerson University. The Graduate Program Council (GPC) is the principal mechanism for bringing together these two constituencies to identify, discuss and address matters relating to that graduate program. The specific mandate of the GPC is to:

2.1. develop and recommend policies relevant to the graduate program within the context of general University policies, especially those of the Yeates School of Graduate Studies (YSGS);

2.2. contribute actively to the operation and long-term planning of the graduate program and YSGS through the creation of committees, working groups and other mechanisms, as deemed appropriate;

2.3. ensure that the graduate program remains current and relevant by monitoring the curriculum of the graduate program on an ongoing basis, and by recommending and/or enacting changes to the current curriculum and methods of delivery as appropriate to ensure that it continues to satisfy the program's objectives;

2.4. provide an arena for the debate, discussion, and dissemination of information on matters pertaining to the graduate program and the YSGS;

2.5. ensure, subject to budgetary limitations, the adequate promotion of the program through appropriate print and electronic promotional material; and to

2.6. review annually the budget of the program and, when required, to make recommendations for amendment(s) to the Dean of Record and to Dean of the Yeates School of Graduate Studies.

3. Council Membership

In accordance with Senate Policy 45 (*Constitutional Provisions for Department/School Councils)*, membership has been determined via a consultative process involving the GPD, the Dean of Record, and the Dean of the YSGS. GPC Membership includes the following:

3.1. The Graduate Program Director (GPD);

3.2. All faculty members who are active YSGS members and who self-identify annually as active in any of the following capacities within a four (4) year period:

3.2.1. teaching in the program; **and/or**

3.2.2. serving on the comprehensive examination or dissertation committees of graduate students of the program; **and/or**

3.2.3. serving on any of the standing or *ad hoc* committees of the graduate program;

3.3. The Chairs/Directors of the Schools/Departments in which any of the faculty members of GPC hold their primary appointment; and

3.4. Two (2) graduate student representatives from each stream, elected annually by and from current graduate students in that stream.

3.5. The Graduate Program Administrator (GPA), who will provide administrative support and be a non-voting member of the Council.

4. Authority

The GPC will operate in the spirit of policy adopted by Senate, in particular, Policy #45: *Constitutional Provisions for Department/School Councils*, as amended by Senate from time to time.

4.1. The GPC is responsible for academic policy and procedure recommendations pertaining to graduate education and graduate offerings specific to this graduate program, housed in the Faculty of Arts. The GPC will collaborate in a transparent manner with related Department/School Council(s), Chair(s)/Director(s), affected Faculty Dean(s) or designate(s), the Dean of YSGS, the YSGS Council and its standing committees.

4.2. The GPC may **approve** policy and procedures with significance and effect only in the program. The GPC may consult with the GPD, affected Faculty Dean(s) or designate(s), Faculty Council(s) where appropriate, the Dean of Record, and the Dean of YSGS before implementing any policy or procedure. The Dean of YSGS shall ensure that all necessary consultations have occurred before endorsing the implementation of any policy or procedure.

4.3. The GPC may **recommend and communicate** policies and procedures with implications beyond the program. Affected Faculty Dean(s), and/or designate(s) and/or the Dean of Record must endorse recommended policies and procedures before they are submitted to the Dean of YSGS and YSGS Council. The YSGS Council makes recommendations for approval to Senate.

4.4. The GPC may report directly to the YSGS Council, with copy to the Dean of Record, on issues specific to the respective program, and/or on matters of general interest.

4.5. Input to committees:

4.5.1. The GPC and its committees will review all matters pertaining to their respective mandates on their own initiative.

4.5.2. The GPC may also request that any of its committees review any particular matter.

Without prejudice to any policy of the Ryerson Senate, the authority of the GPC will embrace these additional principles:

4.6. The GPC will not enter into debate or take action on any matter that would violate the *Ryerson University Act*, or any policy of either the Board of Governors or of Senate.

4.7. The GPC will not enter into debate or take action on any matter that would violate Ryerson University's and/or statutory confidentiality requirements in respect to students, faculty or staff, or on matters of a contractual nature.

4.8. The GPC does not have the authority to override decisions made by other governance bodies that do not report to it. The GPC does, however, have the authority to discuss such decisions and to provide advice, except in cases precluded by considerations of confidentiality and/or contractual requirements, as specified

above. The determination of such restrictions is the responsibility of the Dean of Record. The GPC is advisory to the Dean of Record and/or to relevant Department Chair(s)/School Director(s) on matters that are contractually the responsibility of the Dean of Record and/or the Department Chair(s)/School Director(s) and/or the Department/School Council(s).

4.9. In the event of a disagreement between the GPC and the Dean of Record and/or the Dean of the YSGS that is not resolved through normal avenues of discussion, the disagreement will be referred by the disputants to the Provost and Vice-President Academic. In the event of continuing disagreements, the matter shall be reported to the President for action.

5. Graduate Program Director

5.1. The Graduate Program Director (GPD) – who must be a tenured faculty member whose principal appointment is within the Faculty of Arts – is appointed for a three (3) year term by the Dean of Arts upon the advice of a search committee that shall:

5.1.1. be established by the Dean of Arts at least six (6) months prior to the expiration of the incumbent GPD's term;

5.1.2. consist of

5.1.2.1. the Dean of Arts or designate, who shall Chair the committee;

5.1.2.2. one (1) faculty member from each stream elected by and from faculty members of the GPC; and

5.1.2.3. one (1) graduate student elected by and from the graduate students of the program.

5.2. The Graduate Program Director (GPD) may serve a maximum of two consecutive terms, provided that reappointment occurs following the process outlined in Article 5.1 above.

5.3. The conditions of employment of the GPD will be specified in a Letter of Appointment.

5.4. The GPD is, *ex officio*, a member of all committees and governance structures of the program.

6. Chair of the GPC

6.1. The Chair of the GPC will be elected by GPC members at the first meeting of each academic year. All faculty members of the GPC, including the GPD, are eligible to be nominated and elected.

6.2. The Chair may delegate any of the following tasks, but is responsible for:

6.2.1. calling and conducting meetings, and confirming quorum;

6.2.2. setting meeting agendas;

6.2.3. maintaining a written record of Council decisions, actions, and recommendations; and ensuring that a copy of these records is shared with the GPC and is filed with the GPA and thereby accessible to appropriate personnel in the YSGS and the office of the Dean of Record;

6.2.4. monitoring follow up to Council decisions;

6.2.5. submitting relevant agenda items to applicable YSGS committees (e.g., Programs and Planning Committee) or to the YSGS Council; and

6.2.6. communicating with the Dean of Record, relevant Department Chair(s) and/or Department Council(s), and the YSGS on behalf of the Program Council and/or its Executive Committee.

6.3. As per Article 5.4 above, the GPD is, *ex officio*, a member of all committees and governance structures of the program. Where the GPC Chair elected pursuant to Article 6.1 above is not the GPD, s/he is also a member, *ex-officio,* of all GPC committees and sub-committees.

6.4. The GPC Chair may designate another council member to act as Chair on an interim basis.

7. GPC Procedures

7.1. Normally, the GPC will meet twice per year, once in each of the Fall and Winter semesters. Meetings will be scheduled to permit sufficient time for submissions to be made, and for information and/or approval, where applicable, to reach other committees and councils. Additional meetings may be held at the call of the GPC Chair, the Executive Committee, or at the request of any five (5) Council members.

7.2. Notices of meetings will normally be distributed at least 5 days in advance.

7.3. Only faculty and student members of the GPC are voting members. Staff may serve on the GPC or its committees but are non-voting.

7.4. The Chair is entitled to vote on all questions coming before the GPC and/or any standing committee. In the event of a tie, the Chair has a second, 'casting,' vote.

7.5. Quorum is ten (10), and

7.5.1. the majority of the members present must be faculty members of Council; and

7.5.2. at least two (2) of the student members of Council must be present.

7.6. Voting matters are normally decided by a simple majority of members present and voting at a meeting.

7.7. Decisions, including the election of committee members, may be taken outside meetings through ballots distributed electronically or physically to all members.

7.8. The nomination process – and elections, if there is more than one candidate – will take place in May of each year according to the following schedule:

7.8.1. A call for nominations will be circulated to faculty members of Council and to all graduate students in good academic standing by 30 April in each year, and nominations will be accepted until 4 pm on 14 May (or the following Monday, where 14 May falls on a weekend);

7.8.2. Voting will commence two (2) business days following the close of nominations and will continue until 4 pm on 26 May (or the following Monday, where 26 May falls on a weekend);

7.8.3. Results will be announced before the end of May.

7.9. All members are expected to attend Council and, where relevant, committee and sub-committee meetings. If members are unable to attend they are to inform the Chair of the GPC, relevant committee or sub-committee in advance of the meeting.

7.10. Any faculty Council member may attend a meeting of any committee, of which s/he is not a formal member, as a non-voting participant. Any student Council member may attend, as a non-voting participant, any meeting of any committee that has students included in its formal membership.

7.11. A decision to amend this Bylaw requires a two-thirds majority of the GPC members present and voting at the meeting, and can be taken only after written notice – including the text of the proposed amendment(s) – has been provided to all members at least 5 days in advance of the meeting.

7.12. Proxies are not permitted, and GPC members must be in attendance at a GPC meeting to vote (except where Article 7.7 applies).

8. Standing Committees

The Standing Committees of the GPC are as follows:

8.1. Executive Committee

8.1.1. ***Mandate***:

8.1.1.1. to exercise the functions of the GPC between meetings;

8.1.1.2. to work with the GPD to ensure the efficient and effective operation of the program;

8.1.1.3. to coordinate the activities of, and to consult with, the other standing committees;

8.1.1.4. to recommend, where appropriate, policies, procedures, and practices to the GPC and/or to relevant YSGS bodies;

8.1.1.5. to make recommendations to the GPC and/or, where appropriate, to relevant YSGS bodies, regarding recruitment mechanisms and strategies;

8.1.1.6. to develop, implement, and periodically review (in consultation with the appropriate program and/or YSGS bodies) program registration policies and procedures;

8.1.1.7. to define instructional offences and offences of conduct;

8.1.1.8. to recommend to the GPC, and/or relevant YSGS bodies, policies and practices for graduate student funding (e.g., minimum levels, length of commitment, both full-time and part-time);

8.1.1.9. to be consulted, and to advise the GPD, in the distribution of Research and/or Graduate Assistantships;

8.1.1.10. to recommend to program students sources of funding (e.g., external and internal scholarships, research assistantships, and other awards that may come to the attention of this committee); and

8.1.1.11. to report annually to the GPC on its activity.

8.1.2. ***Chair***: The Chair of the Executive Committee shall be the GPD.

8.1.3. ***Composition***: The Executive Committee (EC) will consist of

8.1.3.1. the Graduate Program Director (GPD);

8.1.3.2. the Chair of the Graduate Program Council elected by the Council pursuant to Article 6.1 of this Bylaw (if someone other than the GPD);

8.1.3.3. one (1) faculty member from each stream, elected by and from faculty members of the GPC by way of a nomination and election process, which may be conducted in person or electronically; and

8.1.3.4. one (1) graduate student elected by and from the six (6) graduate student members of the GPC, using a nomination and election process that may be conducted in person or electronically.

If the graduate student elected is unable to attend any meeting of the Executive Committee, s/he may designate one of the other elected student members of the GPC to attend that meeting in his/her stead.

8.1.3.5. The Graduate Program Administrator will provide support to this committee but is a non-voting member.

8.1.4. ***Terms of office:*** One year, beginning 01st August in the year of election and expiring 31st July of the following year. There is no limit to the number of terms members may serve, provided that the member is eligible to serve and is re-elected to subsequent terms. All GPC elections are to be held in accordance with GPC election procedures

8.1.5. ***Procedural matters***: The provisions of Articles 7.2, 7.3, 7.4, 7.6, and 7.7 of this bylaw will also pertain to its Executive Committee

Quorum is one-half of the committee membership.

8.2. Admissions Committee

8.2.1. ***Mandate***:

8.2.1.1. to review the submissions of applicants and to establish a priority order for offers of admission to be extended;

8.2.1.2. to determine the number of, process to be used in awarding, and recipients of any and all admissions scholarships that are not automatically granted to incoming students (in consultation with the Scholarships and Awards Committee); and

8.2.1.3. to develop, implement, and periodically review (in consultation with the appropriate program and/or YSGS bodies) procedures, practices and standards for admission to the program, including academic and non-academic qualifications (e.g., ESL, program standards).

8.2.2. ***Chair***: The GPD or designate shall chair the committee.

8.2.3. ***Composition***: Graduate Program Director; Chair, GPC (if someone other than the GPD); and two (2) faculty members from each stream, elected by and from faculty members of the GPC by way of a nomination/election process which may be conducted in person or electronically

Should the nomination process fail to produce the necessary committee members, the GPD may appoint eligible faculty to fill any vacancies.

The Graduate Program Administrator will provide support to this committee but is a non-voting member.

8.2.4. ***Term of Office***: one (1) year from 01 August to 31 July. There is no limit to the number of terms committee and sub-committee members may serve, provided that the member is re-elected every year.

8.2.5. ***Procedural matters***: The provisions of Articles 7.2, 7.3, 7.4, 7.6, and 7.7 of this bylaw will also pertain to the Admissions Committee.

Quorum is one-half of the committee membership.

8.3. Curriculum and Studies Committee

8.3.1. ***Mandate***: to ensure that the graduate program remains current and relevant by monitoring the curriculum of the graduate program on an ongoing basis and by making recommendations to the GPC, regarding the following:

8.3.1.1. number and type of courses included in the program;

8.3.1.2. course development, review, and content changes;

8.3.1.3. course requisites and methods of delivery;

8.3.1.4. course registration practices (e.g., course selection and approval);

8.3.1.5. development, review and administration of Progress Report forms;

8.3.1.6. standards for maintaining good academic standing (e.g., grades, continuous registration);

8.3.1.7. residency/post residency requirements;

8.3.1.8. enrolment status requirements and procedures;

8.3.1.9. policy, procedures and practices for graduate examinations (including comprehensive examinations), thesis requirements and thesis examination practices;

8.3.1.10. time limits for completion of graduate programs; and

8.3.1.11. graduation requirements and practices and convocation practices.

8.3.2. ***Chair***: The GPD or designate shall chair the committee.

8.3.3. ***Composition***: The Curriculum and Studies Committee will consist of:

8.3.3.1. the Graduate Program Director;

8.3.3.2. the Chair of the GPC (if someone other than the GPD);

8.3.3.3. one (1) faculty member from each stream, elected by and from faculty members of the GPC using a nomination and election process that may be conducted in person or electronically; and

8.3.3.4. one (1) graduate student from each stream elected by and from the six (6) student members of the GPC using a nomination and election process that may be conducted in person or electronically.

The other graduate student GPC member from each stream will serve as an alternate for the student elected from his/her stream, and will have voice and vote when serving in that capacity.

8.3.3.5. The Graduate Program Administrator will provide support to this committee and its subcommittees, but is a non-voting member.

8.3.4. ***Term of Office***: one (1) year from 01 August to 31 July. There is no limit to the number of terms committee and sub-committee members may serve, provided that the member is re-elected every year. Should the nomination process fail to produce the necessary committee members, the GPD may appoint eligible GPC members to fill any vacancies.

8.3.5. ***Procedural matters***: The provisions of Articles 7.2, 7.3, 7.4, 7.6, and 7.7 of this bylaw will also pertain to the Curriculum and Studies Committee and its subcommittees

Quorum is one-half of the committee or subcommittee membership.

8.3.6. ***Subcommittees***: The Curriculum and Studies Committee (CSC) may establish such standing or *ad hoc* subcommittees as it may consider appropriate, but must specify, at the time the committee is constituted, its membership, Chair, terms of reference, and reporting relationship.

Notwithstanding the generality of the foregoing, there shall be two standing sub-committees as follows:

8.3.6.1. ***Appeals Subcommittee***: To adjudicate student appeals and petitions, the Curriculum and Studies Committee (CSC) shall establish, as required, an Appeals Subcommittee consisting of the GPD and two faculty Council members uninvolved in the appeal, one of whom shall be from the same stream as the student.

8.3.6.2. ***Comprehensive Examination Questions Subcommittee***: To ensure that comprehensive examinations are developed that are reflective of the program's curriculum, the Curriculum and Studies Committee (CSC) shall establish annually a Comprehensive Examinations Questions Subcommittee consisting of the GPD and one (1) faculty Council member from each stream. In consultation with faculty in each stream, the Comprehensive Examination Questions Subcommittee will establish annually a suite of Policy Theory questions and a suite of questions related to each stream.

8.4. Scholarships and Awards Committee

8.4.1. ***Mandate***:

8.4.1.1. to develop, publicize, and administer selection procedures for any awards for which program students make application and for which program input is solicited. Such procedures include, but are not restricted to, assessing applications when committee members have acted as referees; and

8.4.1.2. to fairly assess/adjudicate scholarship/award applications and make recommendations to the Executive Committee.

8.4.2. ***Chair***: The GPD or designate shall chair the committee.

8.4.3. ***Composition***: Graduate Program Director (GPD) and one faculty member from each stream elected by and from the faculty members of GPC using a nomination and election process that may be conducted in person or electronically.

Should the nomination process fail to produce the necessary committee members, the GPD may appoint eligible faculty to fill any vacancies.

The Graduate Program Administrator will provide support to this committee but is a non-voting member.

8.4.4. ***Term of Office***: one (1) year from 01 August to 31 July. There is no limit to the number of terms committee and sub-committee members may serve, provided that the member is re-elected every year.

8.4.5. ***Procedural matters***: The provisions of Articles 7.2, 7.3, 7.4, 7.6, and 7.7 of this bylaw will also pertain to the Scholarship and Awards Committee.

Quorum is one-half of the committee membership.

8.5. Program Membership Committee (PMC)

8.5.1. ***Mandate***:

8.5.1.1. to develop program-specific criteria and procedures for YSGS membership and supervisory responsibilities, which must be consistent with YSGS requirements and be approved by the YSGS Dean;

8.5.1.2. to review membership applications at the program level in light of the rationale established for membership, and to submit its recommendations to the Dean of YSGS in a timely manner; and

8.5.1.3. to review the list of faculty affiliated with the program on an annual basis and submit it to the Dean of YSGS.

8.5.2. ***Chair***: The GPD or designate shall chair the committee.

8.5.3. ***Composition***: Graduate Program Director (GPD) and one faculty member from each stream elected by and from the faculty members of GPC using a nomination and election process that may be conducted in person or electronically.

Should the nomination process fail to produce the necessary committee members, the GPD may appoint eligible faculty to fill any vacancies.

The Graduate Program Administrator will provide support to this committee but is a non-voting member.

8.5.4. ***Term of Office***: one (1) year from 01 August to 31 July. There is no limit to the number of terms committee and sub-committee members may serve, provided that the member is re-elected every year.

8.5.5. ***Procedural matters***: The provisions of Articles 7.2, 7.3, 7.4, 7.6, and 7.7 of this bylaw will also pertain to the Program Membership Committee.

Quorum is one-half of the committee membership.

9. Ad Hoc Committees

9.1. The GPC and/or the Executive Committee may constitute additional committees from time to time to address specific topics such as a conference committee, a Periodic Program Review Committee. Membership, Chair, Terms of Reference, and reporting relationship of ad-hoc committees will be determined at the time the committee is constituted.

9.2. Members will hold office until the report of the committee has been received by the body that created it, or until such time as the ad-hoc committee has been dissolved.

Draft Faculty of Law Council Bylaws

1. Definition of Terms
1.1 **Senate Policy:** Ryerson University Senate Policy.

1.2 **Faculty Council:** Formal Faculty Council, as defined by Senate Policy.

1.3 **Faculty:** The Ryerson University Faculty of Law.

1.4 **JD Program**: the Faculty's Juris Doctor program.

1.5 **Member**: voting or non-voting member of the Faculty Council.

1.6 **Dean:** Dean of the Faculty of Law.

1.7 **Faculty Member:** member or associate member of the Ryerson Faculty Association (RFA), appointed or cross-appointed to the Faculty.

1.8 **Contract Instructor:** Limited Contract (Temporary) Instructors who are members of the CUPE 3904 Unit 1 or Unit 2 bargaining units who teach Faculty courses during the academic year.

1.9 **Student:** individual registered full-time or part-time in the JD degree program.

1.10 **Staff**: current full-time contract or career employees of the Faculty who are members of OPSEU or MAC.

2. Mandate
Following the roles and responsibilities for Faculty Councils outlined in Ryerson Senate Policy 45 on Governance Councils, the role and responsibilities of the Faculty Council shall be as follows:

2.1 Coordinate the development, submission, and review of undergraduate and graduate degree programs, graduate certificates, and Chang School Certificate programs.

2.2 Make recommendations to the Senate, the Dean and other appropriate bodies on the Academic Plan and academic policies affecting the Faculty.

2.3 Review and approve committee proposals requiring the Dean's approval.

2.4 Review periodic reports submitted by each of the Standing Committees established under these bylaws and make recommendations to the Dean on matters arising from these reports.

2.5 Make recommendations on matters identified as significant by the Faculty Council and/or Dean.

2.6 Because the Faculty has no separate schools and departments, the Faculty Council's roles and responsibilities will include those usually performed by Department/School Councils, as outlined in Ryerson Senate Policy 45.[1] Also, because the Faculty will start full operations in the 2020/21 academic year with just one full-time program, the Faculty Council will also perform the functions usually performed by Undergraduate Program Councils, as outlined in Ryerson Senate Policy 45.[2] As the Faculty introduces new full-time programs, either undergraduate or graduate, these bylaws will need to be adjusted.

3. Membership

3.1 **Chair/Secretary**: A tenured faculty member, excluding the Dean, elected by the voting membership at the first meeting of an academic year for a two-year term. The Chair/Secretary conducts meetings, preserves order and decorum, and interprets the Rules of Order. The Chair/Secretary is impartial and may not take part in the debate or vote.

3.2 **Dean**: the Dean is a non-voting member of Faculty Council.

3.3 **Full time Faculty Voting Membership:** All faculty members are voting members of the Faculty Council, except the Associate Deans and Dean.

3.4 **Contract Instructor Voting Membership:** starting in the 2020/21 academic year, 2 voting members selected annually from among contract instructors.

3.5 **Student Voting Membership:** starting in the 2020/21 academic year, 2 JD student voting members elected annually from students enrolled in each year of the JD program.

3.6 **Staff Voting Membership elected annually by the respective groups:**

- 1 member from MAC
- 1 member of OPSEU

3.7 **Ex Officio Non-Voting Membership:** The following are non-voting members of the Faculty Council:

- Ryerson University President
- Provost and Vice-President Academic
- Vice President Research and Innovation
- Vice-Provost Faculty Affairs
- Vice-Provost Academic
- Vice-President, University Advancement and Alumni Relations
- Secretary of Ryerson University Senate
- President of the Ryerson Faculty Association
- President of CUPE Local 3904
- Head Librarian
- Dean of the Chang School of Continuing Education
- Dean of the Yeates School of Graduate Studies

[1] See Section 1.2 of Appendix A of Policy 45, as reproduced in Appendix III of this information package.
[2] Section 2.2, Ibid.

- Starting in the 2023/24 academic year, Faculty of Law Alumni Association Representatives

3.8 **Recording Secretary:** Appointed by the Dean.

4. Meetings and Procedures

4.1 **Regular Meetings:** Starting in the 2020/21 academic year, Faculty Council meetings will be held at least four times in an academic year. Starting in the 2020/21 academic year, the Secretary shall announce the dates for the year's meetings no later than August 1st, taking into consideration applicable academic deadlines.

4.2 **Special Meetings:** A special meeting of the Faculty Council can be called by:

- the Dean; or
- by written request to the Secretary by any voting member supported by at least 5 other voting members of Council. Upon receipt of such a request, a meeting shall be scheduled to be held within 10 days.

4.3 **Meeting Agenda:**

- The agenda for meetings will be circulated to voting members by the Secretary at least 5 days prior to the meeting. The Chair/Secretary will set the agenda, in consultation with the Dean and the Standing Committees.
- A voting member may propose an item for inclusion on a meeting agenda. The proposed item must be forwarded to the Secretary at least 14 days before a scheduled meeting if it is to be considered for inclusion on the agenda.
- The notice of meeting may identify items to be dealt with by consent. A consent agenda item is deemed to be approved unless, prior to the commencement of a meeting, one or more voting members advise the Chair/Secretary of a request to debate it.
- The Dean will be given the opportunity to inform/update the Faculty Council of current news, events, and initiatives prior to the consideration of new businesses and motions.

4.4 Meetings will be conducted under the provisions of Bourinot's Rules of Order.

4.5 Faculty Council meetings shall be open unless a motion to conduct part of any meeting in camera is approved by a majority of voting members present.

4.6 A quorum of all meetings shall consist of one third of voting members, at least one half of which must be Faculty.

4.7 Recommendations approved by the Faculty Council are forwarded to the Dean or other appropriate individuals or bodies.

4.7.1 Recommendations that require Senate approval are forwarded by the Dean to the Senate while recommendations requiring Academic Standards Committee approval are forwarded to the Senate via the Academic Standards Committee.

4.7.2 Where the Dean submits a recommendation to Senate upon which the Faculty Council and Dean have disagreed, the Faculty Council motion and vote count will be presented to Senate by the Chair/Secretary.

4.7.3 In the event of a disagreement, between the Dean and Faculty Council, on a recommendation decision that does not require Senate approval the parties shall:

- Attempt an amicable resolution which may include the withdrawal, postponement, amendment, or further study of the disputed motion through committee.
- If the parties cannot resolve the matter amicably, the Provost will recommend a dispute resolution mechanism in consultation with the Chair/Secretary.

4.8 Rules of Procedure for the Election and Appointment of Members to Council

- Elections and appointments for all constituencies will be completed and reported to the Secretary of Council in March of each year for the following academic year. If, for whatever reason, elections for any of the positions on the Council are not carried out in accordance with these bylaws, it is the responsibility of the Secretary of Council to select representatives to fill these positions.
- Elections Officer: The Secretary of Council shall act as the Elections Officer and oversee all elections of Council.

5. Committees

Committees shall review, develop and make recommendations to the Faculty Council on matters related to their respective mandates.

5.1 Standing Committees

5.1.1. Starting in the 2020/21 academic year, Faculty Council shall have five (5) standing committees with composition and terms of reference and bylaws approved by Faculty Council. They are:

- the Faculty Curriculum Committee;
- the Faculty Academic Standing Committee;
- the Faculty Research Committee;
- the Faculty Admissions Committee; and
- the Faculty Council Governance Committee (FCGC).

5.1.2. Faculty Council, through the FCGC, shall establish and periodically review the terms of reference and composition of standing committees. The FCGC may make recommendations to Faculty Council regarding the establishment or dissolution of standing committees.

5.1.3 Any standing committee may recommend to Faculty Council, via the FCGC, changes to its terms of reference and composition.

5.1.4 The FCGC shall review Faculty Council bylaws annually and report/recommend proposed changes to Council. The FCGC will facilitate alignment of Council and Senate bylaws.

5.1.5 Standing committees must submit a written report to Faculty Council on their activities once every academic year

5.1.6 Standing committees will meet as required.

5.2 Ad Hoc Committees

5.2.1. An ad hoc committee may be formed for a limited term by a Faculty Council resolution. Members need not be voting members of council. Unless reconstituted by council, the committee is dissolved upon presentation of its report. The motion to establish an ad hoc committee must include the terms of reference of the committee, and may include:

- the proposed number of members on the committee;
- details of proposed distribution of members, if any;
- names of proposed members of the committee, if any; and
- the committee report date.

5.2.2. Terms of reference not specified by a Faculty Council motion will be established by the Chair/Secretary of Faculty Council, in consultation with the FCGC.

5.2.3. The Chair/Secretary of Council shall have the authority to form an ad hoc committee, as needed, between scheduled council meetings.

6. Bylaw Changes

6.1 Proposed changes to Faculty Council bylaws shall be submitted in writing to the Chair/Secretary and the FCGC at least 14 days before a scheduled meeting.

6.2 Faculty Council bylaw changes require two-thirds of quorum support in a Faculty Council meeting.

Ryerson University Office of the Registrar

Grading and Examinations Timelines

Information for Senate Meeting, November 5, 2019

1. Motion

That Senate approve the modifications to Ryerson's examination and grading timelines.

2. Reason for Change

If approved, the modifications will achieve three goals that better support faculty, students, and the administration of final exams as follows:

1. The modifications will provide faculty with 5 grading days (currently 4 days)*;
2. The modifications will provide students with a study day* between the end of term classes and the first day of the examination period (currently 0 days)
3. The modifications will provide an additional 1-2 days for the scheduling of exams.

*Leap years and other calendar anomalies excepted.

3. Highlights of What Will Change

- In most years, faculty will have a minimum of 5* working days for grading (currently 4 days) prior to the university's winter break closure.

- Fall grades and academic continuance processes within the Office of the Registrar will be started in the early morning of the first day back from the winter break instead of during the winter break period.

- In most years, students will gain a study day between the last day of classes and the first day of exams (currently there are no study days). Exceptions will apply depending where statutory holidays fall in the calendar year and/or in leap years. For example, in spring 2020, Good Friday falls immediately after the last day of the term, so exams will begin on the Monday.

- In most years, the Registrar's Office (University Scheduling) will have one to two additional days over which to schedule exams (10 days are currently available). Extra days will help to reduce exam conflicts and back-to-back exams for students.

- Two university-wide common final examination make-up days have tentatively been incorporated into the schedule effective 2020-21.

4. Chart Summary of Changes

		Current Model	New Model	*Notes*
Study day(s)	Fall 2020	No study day	1 study day (Tue, Dec 8, 2020)	Normally, when classes end on a Friday, we would start exams on Saturday. In order to accommodate the study day, the exam period would instead start on Monday in Winter 2021.
	Winter 2021	2 study days (Sat. April 17 & Sun, April 18, 2021)	2 study days (Sat. April 17 & Sun, April 18, 2021)	
Exams held on Sundays	Fall & Winter	No exams on Sundays	Exams on Sundays	As in current model, no exams will be scheduled on Good Friday or Easter Sunday if they fall during exam period
Exam Period	Fall 2020	10 days + 1 contingency day	10 days + 1 contingency day	Exams are not scheduled on the contingency day. Available for rescheduling only if needed. When not used, provides an additional day for faculty grading.
	Winter 2021	11 days + 1 contingency day	12 days + 1 contingency day	
Exam make-up days	Fall 2020	No designated exam make-up days	2 designated university wide exam make-up days: Tues, Dec 22, 2020 & Sat. Jan 16, 2021.	Optional for Faculties to utilize.
	Winter 2021	No designated exam make-up days	2 designated university wide exam make-up days: Tues, May 4, 2021 & Sat, May 8, 2021	
Instructor grading period	Fall 2020	4 days for grading	5 days for grading	
	Winter 2021	4 days for grading	5 days for grading	
Academic Continuance (Grading Period)	Fall 2020	December 2020 (Prior to Mid-Year Break)	January 2021 (Starts the first day back when the university reopens.)	
Student access to view grades and standings in RAMSS during academic continuance	Fall & Winter	**Access restricted** during academic continuance. Students cannot see their unofficial grades and standings during the academic continuance period.	Access **is open** during academic continuance. Students will be able to see unofficial grades and standings during the academic continuance period. During this period, grades and standings are subject to change as Academic Program Departments review student academic performance and approve overrides and exceptions.	Course enrolment will still open over the winter break.
Grades and Standings Official (For Students)	Fall 2020	Sat, Dec 27, 2020	Tue, Jan 12, 2021	Students will not know their official grades or standings during enrolment period Grades and standings will be official after Engineering classes have started. Students may be dropped from classes due to RTW/PPW standing or failing prerequisite courses after start of classes

5. Impact on students

- Students will be able to view unofficial course grades and standings throughout the December winter break and for a few days in January until official grades are confirmed (currently, students are blocked from viewing any unofficial grades and standings during the academic continuance processing period).

- Students will receive their final & official Fall Term grades during the first week in January (Engineering students will already be attending winter term classes).

- Once the Fall term official grades are posted, students who are no longer eligible to be in a course(s) (e.g. failed a prerequisite or have a RTW or PPW academic standing outcome) will be dropped from courses while in progress. Based on Fall 2018 standings, this would affect approximately 1.37% (485) of all students receiving standings (35,393 students).

6. Impact on faculty, program administrators and support staff

- Increase in number of days designated for grading

- More Saturday exams; Sunday exams likely

- Student support initiatives - academic advising, probationary and other student support programs may be delayed until grades and standings are official during the first week of term start-up.

7. Cost impacts

- **Increased central cost of running final exams.** Invigilation and security costs will increase modestly by approximately $3,000-5,000 (does not include expansion of use of facilities at the MAC) due to the addition of one to two additional days of exam operations.

- **Increased Faculty & academic program costs.** Faculties/programs will incur additional costs for invigilation due to the additional exam days and Sunday exams

Policy Changes Required

Policy 48 - Undergraduate Academic Term

“There will be no examinations or tests scheduled in the last week of the Fall and Winter semesters, or on the Saturday or Sunday before the examination period.”

- ➢ Proposed Change, Section 4 **-** There will be no examinations or tests scheduled in the last week of the Fall and Winter terms.

Section 6
“The Winter Examination Period will normally end by April 30. Due to final exam period constraints, Ryerson finds it necessary to schedule final exams on Saturdays”

- ➢ Proposed Change: Section 6 - The Winter Examination Period will normally end by April 30.
- ➢ Add new item, label as Section 7 (renumber the current Section 7 to Section 8) Add - Final Exams may be scheduled on Sundays.

Section 7 (in current policy, labelled as Section 7; if approved, to renumber as Section 8)
“The reporting of final grades will normally be done within one week of the end of the examination period.”

- ➢ Proposed Change: Section 8 - The reporting of final grades will normally be done within one week of the end of the examination period. For the Fall term, reporting of final grades will normally be done within one week of when the university reopens after the Mid Year Break.

- **Policy 46 – Undergraduate Grading, Promotion, and Academic Standing Policy 46, “The GPA Policy”**

2.4.2.1 - “Students with Probationary standing are required to have a developmental Probationary Contract outlining a specific plan for studies and academic supports authorized by their program School or Department, and signed by the Student. Students who fail to have such a Probationary Contract within five (5) working days of the first day of the semester will have their course registrations and course intention requests cancelled for the term in question.”

- ➢ Proposed Change: Students with Probationary standing are required to have a developmental Probationary Contract outlining a specific plan for studies and academic supports authorized by their program School or Department, and signed by the Student. Students who fail to have such a Probationary Contract by the last day to add courses for the specified term will have their course registrations and course intention requests cancelled for the term in question.

9. Consultations

On June 11, 2019, the Academic Governance and Policy Committee (AGPC) of Senate recommended the proposal go to Senate. Prior to this, on November 7, 2018, and again on December 6, 2018, APG discussed the merits of and potential to change grading and examination timelines. Additional consultations have included, among others, Human Resources (C.Sass-Kortsak), Faculty Affairs (S. Zolfaghari), University Scheduling (R.Rocca), Examinations (M.Green) and Operations Support (C.Posa, A.Toste). Deans & key stakeholders met on May 11, 2019 to finalize details and agreed that the following changes would benefit students, faculty and administrators.

10. Implementation Plan

If approved at Senate in Fall 2019, the changes will be implemented for the 2020-21 academic year. A comprehensive communications plan for students, academic and other community stakeholders will be developed.

Respectfully submitted,

Charmaine Hack
University Registrar

Appendix 1

Exams, Grading and Term Start Up Timeline – Comparison of Current and Proposed Model

2020-21

Function	Current Model	Proposed Model
Fall classes begin	Tuesday, Sept 8	Tuesday, Sept 8
Fall study week (Engineering)	None	None
Fall study week (all other faculties)	Monday, Oct 12 – Friday, Oct 16	Monday, Oct 12– Friday, Oct 16
Fall last day of classes	Monday, Dec 7	Monday, Dec 7
Fall study day(s)	None	Tuesday, Dec 8 1 day
Fall exam period	Tuesday, Dec 8 – Saturday Dec 19 (excluding Sundays) 10 days + 1 contingency	Wednesday, Dec 9 – Saturday, Dec 19 (including Sundays) 10 days + 1 contingency
Exam contingency day	Saturday, Dec 19	Saturday, Dec 19
Fall exam make-up day(s)	None	Tuesday, Dec 22, 2020 Saturday, Jan 16, 2021 2 days
Fall instructor grading time	Saturday, Dec 19 – Tuesday, Dec 22 4 days	Saturday, Dec 19 – Wednesday, Dec 23 5 days
Mid year break	Thursday, Dec 24, 2020 – Wednesday, Jan 6, 2021	Thursday, Dec 24, 2020 – Wednesday, Jan 6, 2021
Fall academic continuance	Wednesday, Dec 23 – Saturday, Dec 26, 2020	Thursday, Jan 7 – Monday, Jan 11, 2021
Fall RAMSS access restricted	Tuesday, Dec 22 – Saturday, Dec 26	No restricted access
Fall grades official	Sunday, Dec 27, 2020	Tuesday, Jan 12, 2021
Winter enrolment	Monday, Dec 28, 2020 – Friday, Jan 29, 2021	Monday, Dec 28, 2020 – Friday, Jan 29, 2021
Winter classes begin	Monday, Jan 11 (Engineering) Friday, Jan 15 (all other faculties)	Monday, Jan 11 (Engineering) Friday, Jan 15 (all other faculties)
Fall grade/standing appeal deadline	Friday, Jan 22	Monday, Jan 25
Winter last day to add classes	Friday, Jan 22 (Engineering) Friday, Jan 29 (all other faculties)	Friday, Jan 22 (Engineering) Friday, Jan 29 (all other faculties)
Winter study week (all faculties)	Monday, Feb 15 – Friday, Feb 19	Monday, Feb 15 – Friday, Feb 19
Winter last day of classes	Friday, April 16	Friday, April 16
Winter study day(s)	Saturday, April 17 – Sunday, April 18 2 days	Saturday, April 17 – Sunday, April 18 2 days
Winter exam period	Monday, April 19 – Saturday, May 1 (excluding Sundays) 11 days + 1 contingency	Monday, April 19 – Saturday, May 1 (including Sundays) 12 days + 1 contingency
Exam contingency day	Saturday, May 1	Saturday, May 1
Winter exam make-up day(s)	None	Tuesday, May 4 Saturday, May 8 2 days
Winter instructor grading time	Saturday, May 1 – Tuesday, May 4 4 days	Saturday, May 1 – Wednesday, May 5 5 days
Winter academic continuance	Wednesday, May 5 – Friday, May 7	Thursday, May 6 – Monday, May 10
Winter grades official	Monday, May 10	Tuesday, May 11
Winter RAMSS access restricted	Tuesday, May 4 – Sunday, May 9	No restricted access
Spring classes begin	Monday, May 3	Monday, May 3

Appendix 2

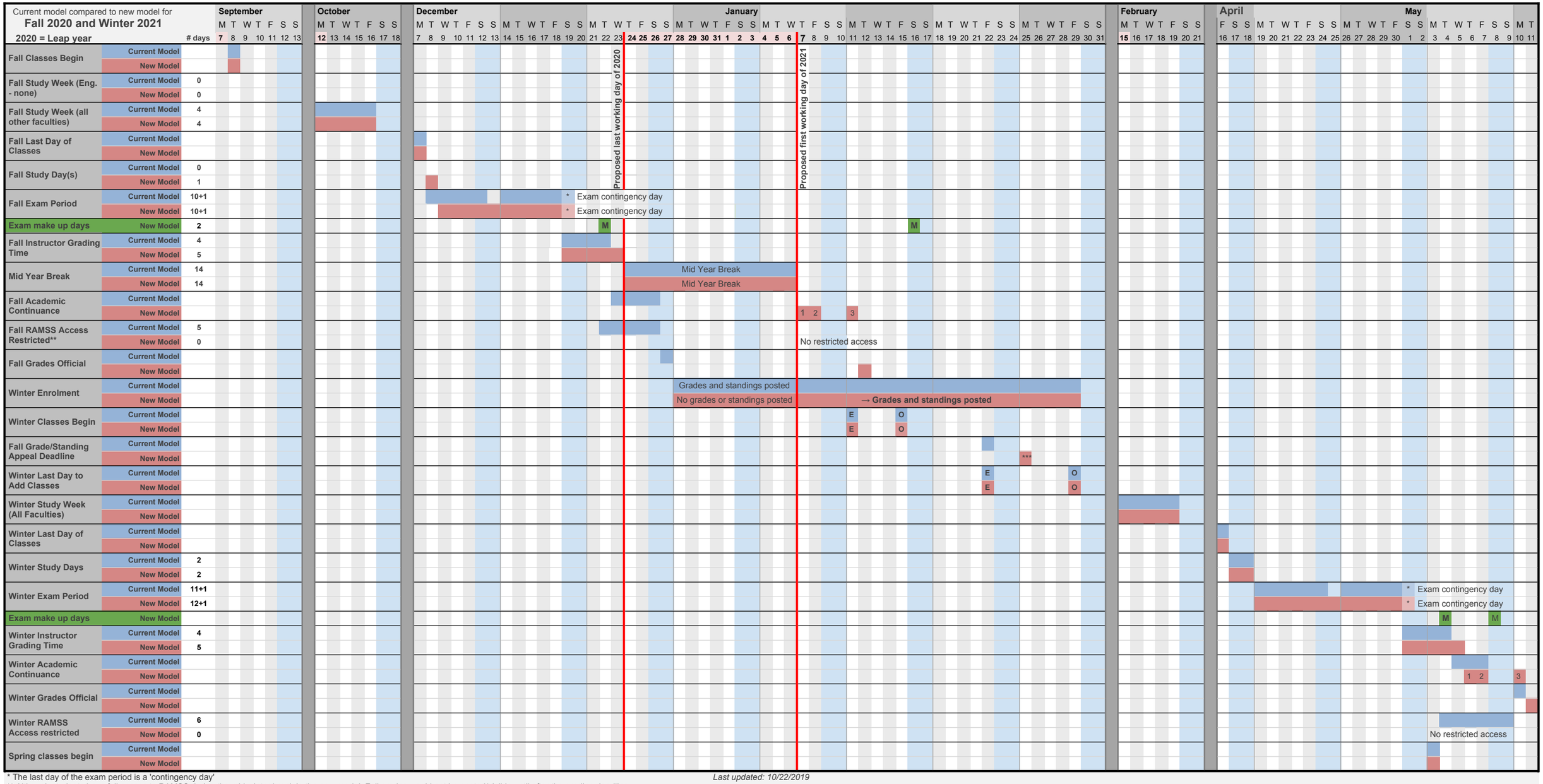
Exams, Grading and Term Start Up Timeline – Comparison of Current and Proposed Model

2021-22

Function	Current Model	Proposed Model
Fall classes begin	Tuesday, Sept 7	Tuesday, Sept 7
Fall study week (Engineering)	None	None
Fall study week (all other faculties)	Monday, Oct 11 – Friday, Oct 15	Monday, Oct 11 – Friday, Oct 15
Fall last day of classes	Monday, Dec 6	Monday, Dec 6
Fall study day(s)	None	Tuesday, Dec 7 1 day
Fall exam period	Tuesday, Dec 7 – Saturday Dec 18 (excluding Sundays) 10 days + 1 contingency	Wednesday, Dec 8 – Sunday, Dec 19 (including Sundays) 11 days + 1 contingency
Exam contingency day	Saturday, Dec 18	Sunday, Dec 19
Fall exam make-up day(s)	None	Tuesday, Dec 21, 2021 Saturday, Jan 8, 2022 2 days
Fall instructor grading time	Saturday, Dec 18 – Tuesday, Dec 21 4 days	Sunday, Dec 19 – Thursday, Dec 23 5 days
Mid year break**	Friday, Dec 24, 2021 – Thursday, Jan 6, 2022	Friday, Dec 24, 2021 – Thursday, Jan 6, 2022
Fall academic continuance	Wednesday, Dec 22 – Sunday, Dec 26, 2021	Friday, Jan 7 – Tuesday, Jan 11, 2022
Fall RAMSS access restricted	Tuesday, Dec 21 – Sunday, Dec 26	No restricted access
Fall grades official	Monday, Dec 27, 2021	Wednesday, Jan 12, 2022
Winter enrolment	Tuesday, Dec 28, 2021 – Friday, Jan 28, 2022	Tuesday, Dec 28, 2021 – Friday, Jan 28, 2022
Winter classes begin	Monday, Jan 10 (Engineering) Friday, Jan 14 (all other faculties)	Monday, Jan 10 (Engineering) Friday, Jan 14 (all other faculties)
Fall grade/standing appeal deadline	Monday, Jan 24	Tuesday, Jan 25
Winter last day to add classes	Friday, Jan 21 (Engineering) Friday, Jan 28 (all other faculties)	Friday, Jan 21 (Engineering) Friday, Jan 28 (all other faculties)
Winter study week (all faculties)	Monday, Feb 21 – Friday, Feb 25	Monday, Feb 21 – Friday, Feb 25
Winter last day of classes	Thursday, April 14	Thursday, April 14
Winter study day(s)	Friday, April 15 – Sunday, April 17 3 days	Friday, April 15 – Sunday, April 17 3 days
Winter exam period	Monday, April 18 – Saturday, April 30 (excluding Sundays) 11 days + 1 contingency	Monday, April 18 – Saturday, April 30 (including Sundays) 12 days + 1 contingency
Exam contingency day	Saturday, April 30	Saturday, April 30
Winter exam make-up day(s)	None	Wednesday, May 4 Saturday, May 7 2 days
Winter instructor grading time	Saturday, April 30 – Tuesday, May 3 4 days	Friday, April 30 – Tuesday, May 4 5 days
Winter academic continuance	Wednesday, May 4 – Friday, May 6	Thursday, May 5 – Monday, May 9
Winter grades official	Monday, May 9	Tuesday, May 10
Winter RAMSS access restricted	Tuesday, May 3 – Sunday, May 9	No restricted access
Spring classes begin	Monday, May 2	Monday, May 2

**winter break dates to be confirmed

Exams, Grading and Term Start Up Timeline - Comparison of Current Model and New Model for 2020/2021



* The last day of the exam period is a 'contingency day'
** Although students have full access to RAMSS during the mid winter break in the new model, Fall grades would not be posted/visible until after the grading deadline
*** In the new model, appeal deadline would be moved to Monday, January 25 to allow 10 business days after Fall terms official (inclusive)

Last updated: 10/22/2019

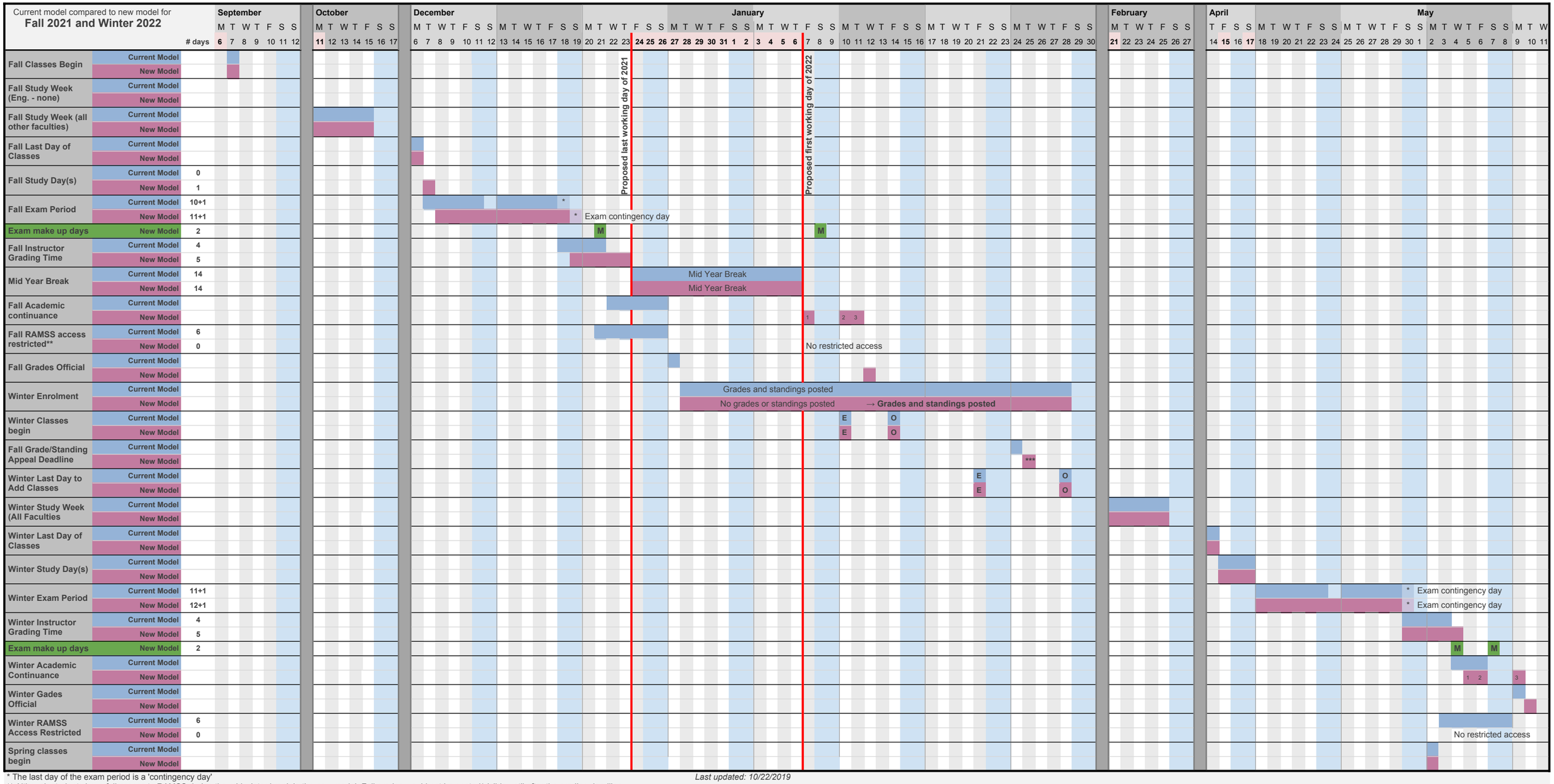
Academic Continuance Period
1. Students will see unofficial grades
2. Academic departments review academic standings
3. Student Records updates any academic standing changes/overrides requested by academic departments

E - dates applicable to Engineering classes
O - dates applicable to classes in all other faculties

Holidays
Labour Day: Monday, September 7, 2020
Thanksgiving: Monday, October 12, 2020
Mid Year Break: Thursday, December 24, 2020 to Wednesday, January 6, 2021, inclusive
Family Day: Monday, February 15, 2021
Good Friday: Friday, April 2, 2021
Easter Sunday: Sunday, April 4, 2021

Exams, Grading and Term Start Up Timeline - Comparison of Current Model and New Model for 2021/2022

Current model compared to new model for
Fall 2021 and Winter 2022



* The last day of the exam period is a 'contingency day'
** Although students have full access to RAMSS during the mid winter break in the new model, Fall grades would not be posted/visible until after the grading deadline
*** In the new model, appeal deadline would be moved to Wednesday, January 25 to allow 10 business days after Fall term grades are official (inclusive)

Last updated: 10/22/2019

Academic Continuance Period
1. Students will see unofficial grades
2. Academic departments review academic standings
3. Student Records updates any academic standing changes/overrides requested by academic departments

E - dates applicable to Engineering classes
O - dates applicable to classes in all other faculties

Holidays
Labour Day: Monday, September 6, 2021
Thanksgiving Day: Monday, October 11, 2021
Mid Year Break: ***December 24, 2021 to January 6, 2022, inclusive [tentative]***
Family Day: Monday, February 21, 2022
Good Friday: Friday, April 15, 2022
Easter Sunday: Sunday, April 17, 2022

REPORT OF THE SCHOLARLY, RESEARCH AND CREATIVE ACTIVITY COMMITTEE
Report #F2019–1; October 2019

In this report the Scholarly, Research and Creative Activity Committee brings to Senate its recommendation to adopt the 2019 - 2024 Strategic Research Plan.

Recommendation

- The SRCAC unanimously recommends that Senate adopt the 2019 - 2024 Strategic Research Plan.

Respectfully Submitted,

Steven N. Liss, Chair for the Committee

SRCAC Members:

- Naomi Adelson, Associate Vice-President, Research and Innovation
- Asher Alkoby, Chair, Research Ethics Board
- Cory Searcy, Interim Dean, Graduate Studies
- Donna Bell, Secretary of Senate
- Patrizia Albanese, Associate Dean, Faculty of Arts
- Ozgur Turetken, Associate Dean, Ted Rogers School of Management
- Charles Davis, Associate Dean, Faculty of Communications & Design
- Jennifer Martin, Associate Dean, Faculty of Community Services
- Michael Kolios, Associate Dean, Faculty of Science
- Sri Krishnan, Associate Dean, Engineering & Architectural Science
- Dana Thomas, Associate Chief Librarian
- Andriy Miransky, Associate Professor, School of Computer Science, Faculty of Science
- Julia Spaniol, Assistant Professor, Department of Psychology, Faculty of Arts
- Yuanshun Li, Associate Professor, Accounting & Finance, Ted Rogers School of Management
- Richard Adams, Professor, Graphic Communications Management, Faculty of Communication & Design
- Nancy Walton, Director, Nursing, Faculty of Community Services
- Ravi Ravindran, Professor, Mechanical Engineering, Faculty of Engineering and Architectural Science
- Brian Cameron, Librarian
- Liping Fang, Associate Dean, Faculty of Engineering & Architectural Science
- Katey Park, Graduate Student, Psychology
- Simon Donato-Woodger, Undergraduate Student Senator

SCHOLARLY, RESEARCH AND CREATIVE ACTIVITY COMMITTEE REPORT

Report #F2019–1; October 2019

At its October 2018 meeting, the Senate SRC Activity Committee formed a Steering Committee and approved a process to guide the development of the new Strategic Research Plan. The plan was brought forward to the December 2018 Senate meeting for information.

The Strategic Research Plan Steering Committee was formed with representation from all faculties and chaired by Naomi Adelson, AVPRI. The Office of the Vice-President, Research and Innovation would like to thank the following individuals for their outstanding service and contributions to the development of the new Strategic Research Plan:

- **David Cramb**, Dean, Faculty of Science
- **Dagmawi Degefu**, Postdoctoral researcher, Faculty of Science
- **Sepali Guruge**, Faculty of Community Service
- **Dan Jakubek**, Library
- **Fahim Khan**, Undergraduate Student
- **Lynn Lavallée**, Strategic Lead, Indigenous Resurgence, Faculty of Community Service
- **Ali Mazalek**, Faculty of Communication & Design
- **Catherine Middleton**, Ted Rogers School of Management
- **Melina Ovanessian**, Graduate Student
- **Ruth Panofsky**, Faculty of Arts
- **Pawel Pralat**, Faculty of Science
- **Peggy Shannon**, Faculty of Communication & Design
- **Sharareh Taghipour**, Faculty of Engineering & Architectural Science
- **Josephine Wong**, Faculty of Community Service

Multi-Phased Consultation Process

The Strategic Research Plan articulates the University's key research themes and areas of current focus which represent Ryerson's strategic strengths and reflect the diverse scholarly, research and creative activity that is taking place across the institution.

To develop the new Strategic Research Plan, the Steering Committee followed an iterative, collaborative consultation process.

In addition to the Town Halls, additional meetings were held that were dedicated to the discussion of Indigenous focused SRC activities and internationalization.

Strategic Research Plan 2019 - 2024
Major highlights of the new plan include:

- Capturing “how” Ryerson approaches SRC activity - includes guiding principles of equity, diversity, inclusion and access
- Six strategic research themes
    - Urban Innovation
    - Justice, Equity & Society
    - Culture & Creativity
    - Work, Skills, Industry
    - Health & Well-Being
    - Technology & Intelligent Systems
- Eight areas of current focus
    - City Building and Urban Innovation
    - Biomedical Engineering, Science & Technology
    - Energy
    - Future Skills
    - Migration and Settlement
    - Democracy Studies
    - Cybersecurity
    - Creative Innovation
- Indigenous Thought & Resurgence priority
- Measures of success
    - Research funding and collaboration
    - Recognition
    - Impact
    - Growth
- OVPRI supports

Recommendation
The SRCAC unanimously recommends that Senate adopt the 2019 - 2024 Strategic Research Plan.

Ryerson University
Office of the Vice-President, Research & Innovation

Draft Strategic Research Plan 2019-2024

Inventive and Purposeful Thinkers and Creators

Ryerson University is located in the heart of Toronto – one of the most dynamic, diverse urban centres in the world – and leverages the energy of its location to foster bold thinking, collaborative partnerships, innovation, and entrepreneurship. Our Scholarly, Research and Creative (SRC) engagement is strengthened by a willingness to cross disciplinary boundaries, break down barriers, build alliances and take risks to advance inquiry, discovery, knowledge, and creative works. Incubating local, national, and international networks and communities of practice, Ryerson researchers are generating and applying knowledge across a broad range of disciplines, fields, professions, and private, public, and non-profit sectors.

Ryerson: A Hub for World-Leading Researchers Working to Solve Complex Real-World Problems

Led by intellectual curiosity and a desire for sustainable change, Ryerson researchers are creating evidence-based solutions and activating real-world transformation. Ryerson's distinctive core mission – to serve societal need – responds to the demand for highly skilled creative and critical thinkers who address increasingly interconnected, complex problems and work towards effective solutions. Our faculty and students are willing to defy convention as they seek solutions to make the world a better place for all. As a globally connected city university, we believe that inclusive and collaborative approaches are essential to great research. To that end, Ryerson is committed to cooperation and partnerships with diverse communities, industry, stakeholders, and government. Ryerson researchers are building on the success of these partnerships as we continue to forge new ones.

DRAFT

Guiding Principles -
Equity, Diversity, Inclusion, and Access

Foundational to SRC activity at Ryerson are the principles of equity, diversity, inclusion, and access. Together, these principles underscore our commitment to and expression of social justice and are essential to our integrated approach to SRC activity as they cross-cut Ryerson's strategic research themes and objectives. At Ryerson, we intentionally advance equity, diversity, inclusion, and access through our SRC activities. Advancing these principles amplifies our research and innovation opportunities, removes barriers, fosters multiple worldviews, and cultivates an enriched environment for SRC success. These guiding principles incorporate and advance Indigenous knowledges and perspectives, build on existing Indigenous SRC leadership, and strengthen SRC relationships in a reciprocal and respectful manner.

Equity, diversity, inclusion, and access are expressed and promoted through a multiplicity of perspectives, experiences, and methodological approaches to the SRC work undertaken at the university. As a signatory to the Dimensions Charter and a selected pilot institution, Ryerson is committed to these principles and associated practices that will further strengthen the overall excellence of SRC activities.

> *When equity, diversity and inclusion considerations and practices are integral to research participation, to the research itself, and to research training and learning environments, research excellence, innovation and creativity are heightened across all disciplines, fields of study and stages of career development. (Dimensions, Principle 4)*

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SRC Strengths and Priorities

Central to Ryerson's success is a focus on SRC excellence and impact through a combination of investments by faculties, researchers, and the institution. Striving for the highest standards in SRC excellence, Ryerson is enabling SRC growth by supporting strategic hiring priorities, driving multidisciplinary SRC initiatives, growing graduate programming and training, and recognizing distinction in SRC activity. Success also includes a commitment to the full spectrum of community engagement and knowledge translation towards improving the quality of life for the world's citizens through sustainable social, physical, and technological innovation.

Ryerson's strengths and priorities in SRC activity, innovation, and entrepreneurship are reflected through named research chairs, recognized research centres, and commercialization activity with industry. Together they highlight Ryerson's national and international leadership.

Using the Strategic Research Plan as a guide, Ryerson will strengthen strategic and multidisciplinary collaborations across themes, expand international partnerships, and promote greater alignment between the innovation ecosystem and research through enhanced commercialization, knowledge translation, and mobilization. In support of this expansion and the anticipated growth of activities, Ryerson will continue to streamline administrative and infrastructure support, including strengthening the quality of our accountability framework and reputation-enhancing initiatives.

Strategic Themes

The six strategic themes outlined below highlight where Ryerson is driving SRC intensity, impact, and excellence. They are neither exhaustive nor prescriptive. With a focus on local, national, and international engagement and cooperation, and partnerships with academic institutions, government, non-profit and community-based organizations, as well as the private sector, the themes – and the confluence of activities they represent – respond to societal needs and advance transformative knowledge. These themes highlight the ways in which Ryerson's SRC community addresses complex problems that demand bold and creative solutions, such as those described in the United Nations 2030 Sustainable Development Goals. Ryerson's SRC activities are making a significant impact in a rapidly evolving world. The six themes are as follows:

- Urban Innovation
- Justice, Equity & Society
- Culture & Creativity
- Work, Skills, Industry
- Health & Well-Being
- Technology & Intelligent Systems

Urban Innovation

Global populations are increasingly mobile and concentrated in urban centres. With our collective future tied to climate change and the fate of cities, the health of our urban environments relies on innovative solutions to complex and often interlinked social, economic, political, environmental, cultural, and technological challenges. Canada's cities are growing, with roughly 80% of Canadians living in urban areas and with the vast majority of the almost 300,000 people who migrate to Canada each year settling in cities and suburbs across the country. Newcomers are vital to Canada's diversifying cultural, social, and economic landscapes and its expanding workforce. Ryerson research is devoted to defining issues of urban innovation, including the physical, technological, and societal aspects of urban growth and change. Ryerson researchers are actively seeking partnerships and new ways to ensure that cities are safe, resilient, and sustainable. Our current expertise ranges from sustainable housing and renewable energy to the future of land use and water policy, from food security to smart infrastructure, migration, settlement, responsible development, and urban design.

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Justice, Equity & Society

Increasingly, democratic states and institutions are facing a combination of external and internal challenges. Changes in the manner in which information is communicated have fundamentally altered journalism and the media industry. Trust in public institutions is eroding and participation in traditional forms of democratic engagement is declining. Growing income and social inequality and a rise in populism compound these challenges. There are systemic factors within the judicial system that result in inequity and injustice. These challenges, impacts, and intersections are taken up by our faculty as we continue to build capacity in the study of democratic institutions with a focus on inclusivity, governance, and engagement.

Culture & Creativity

Art and creative expression expand the ways we think about the world and our place in it, enrich our lives, and help us arrive at creative solutions to real-world problems. Blurring the line between conventional research and creative practice, and drawing from a diverse urban and academic milieu, Ryerson faculty combine traditional media with new technologies to drive innovation in design and culture industries. Fields of inquiry range from the digital humanities, photography, and theatre to augmented reality, activist art, and the protection of cultural heritage. Using a range of methods of curation and creation, in fields such as journalism, communication, and marketing, and in pioneering forms of accessible design, our SRC leaders are forging new practices and standards for academic, professional, business, and public audiences.

Work, Skills, Industry

With nearly 42% of Canadian jobs likely to be affected in some way by automation over the next two decades, and with the disruptive nature of social media, unprecedented access to big data, and analytic advances, all aspects of the workforce and management will need to adapt. Canada's competitiveness and prosperity therefore depend on building a resilient workforce by matching skills and employment opportunities, access to life-long learning, as well as ensuring the full participation of the underemployed and unemployed, including equity-seeking groups and underserved communities. As technological and skills innovation are key areas of research at Ryerson, we are ideally positioned to take the lead in investigating and developing tools and strategies that will advance inclusive, ethical, and sustainable economic growth and productive employment.

Health & Well-Being

Ryerson approaches health and well-being research by focusing on quality of life and promoting well-being for all. In advancing health-related SRC activities, our multidisciplinary and multi-sectoral researchers work across a range of disciplines and perspectives that address personal, social, economic, technological, and environmental factors impacting health and well-being at the individual, community, and global levels. Our SRC leaders are innovators in the fields of biotechnology and robotics, and in the use of intelligent systems in disease recognition and treatment. They are advancing research impact in areas such as patient experience, nursing, aging, mental health, housing and design, social practices, and nutrition.

Technology & Intelligent Systems

Advanced manufacturing drives Canada's economy and accounts for approximately 11% of the country's GDP. We have invested in machines and technology that are at the intersection of design and user experience, and will unlock new possibilities for the future of human-machine interactions. Ryerson is pioneering technology and design in sectors such as manufacturing, aerospace, robotics, security, retail, and construction. Working with industrial partners, Ryerson is creating a strong technological and industrial ecosystem through our research in engineering, design, management, and production. Innovations in sustainable industrialization and intelligent systems are transforming a wide variety of sectors, including the Internet of Things, autonomous systems, process optimization, advanced manufacturing, 3D printing, aerospace, robotics, and cybersecurity.

Indigenous Thought & Resurgence

Indigenous Thought & Resurgence, which transcends a single thematic focus, captures the collectivity of work being undertaken at Ryerson to cultivate Indigenous-led SRC growth and success across the institution. Specific attention to Indigenous knowledges and perspectives as well as processes of decolonization is a priority. Recent investments in areas such as digital humanities and Indigenous governance represent some of the ways that Ryerson is committed to cultivating Indigenous-led SRC growth.

The establishment and maintenance of relevant and appropriate SRC engagement with Indigenous individuals and communities is integral to the institutional commitment to Indigenous Thought & Resurgence. Specifically, we understand that SRC activities with Indigenous peoples is conducted in a manner that is relational and respectful of Indigenous communities and individuals, demonstrates concern for the collective and individual welfare of Indigenous peoples, and is collaborative in nature.[1]

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[1] "Guidelines for Research Involving Indigenous Peoples in Canada" (Ryerson University Research Ethics Board).

Current Areas of Focus

The areas of focus listed below reflect a clustering of activities and synergies that have critical mass and are ready for accelerated growth in SRC activity and investment. Building on a solid foundation of excellence and academic leadership, these areas present strategic and enhanced opportunities for national and international collaboration, industry and community partnerships, funding, recognition, and impact.

1. City Building and Urban Innovation
   City building is central to an extensive range of SRC activity at Ryerson. Leveraging the Centre for Urban Innovation, Ryerson has the opportunity to harness a rich constellation of activities, interests, and expertise to bring greater focus and scale to the university's leadership on critical urban issues and to define the cities of the future.

2. Biomedical Engineering, Science & Technology
   By building and strengthening partnerships with hospitals, the clinical community and the communities they serve, Ryerson is expanding its research networks and enhancing access to state-of-the-art labs and infrastructure. Through collaborative platforms, such as the Institute for Biomedical Engineering, Science and Technology, Ryerson researchers can continue to develop new and innovative ways of advancing clinical care and making discoveries that align with market need.

3. Energy
   Ryerson is uniquely positioned to contribute to solving the challenges faced by the energy sector – particularly those related to global warming. Through our Centre for Urban Energy, an academic-industry partnership committed to exploring and developing sustainable solutions to urban energy challenges, Ryerson researchers are advancing how we generate, transport, store, and consume energy.

4. Future Skills
   With the award of the federally-funded Future Skills Centre, which builds on the expertise of the Diversity Institute and Magnet, Ryerson is poised to deepen and broaden SRC-related activity with a focus on how to best prepare Canadians for future workforce opportunities. This includes the changing nature of skills and competencies, and the policies, processes, and tools that advance economic inclusion and success.

5. Migration and Settlement
   Ryerson's established research expertise in migration, integration, refugee, and diaspora studies and the work of the Ryerson Centre for Immigration and Settlement has increased capacity with the Canada Excellence Research Chair in Migration and Integration. Together they set the course for further opportunities for growth and international scope.

6. Democracy Studies
   With a Jarislowsky Democracy Chair and two Canada Research Chair (CRC) allocations, Ryerson is deepening and expanding its research expertise, teaching, and public outreach on issues related to democratic politics, Indigenous governance, and civic engagement.

7. Cybersecurity
   Cybersecurity is an immediate global issue. Along with the investment of future CRCs in this area, Ryerson is bringing together researchers, government, and industry leaders through the Rogers Cybersecure Catalyst and will leverage both resources and entrepreneurial capacities to solve critical security challenges.

8. Creative Innovation
   Working with the most dynamic and innovative creative companies in Canada, Ryerson is enhancing opportunities for collaborations between researchers and industry towards transformational and disruptive innovation. Investments in the Faculty of Communication and Design's Catalyst and Creative Technology Lab reflect Ryerson's integrated, multidisciplinary research approach.

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Cultivating Success – Encouraging Bold Ideas

Ryerson leverages its historical mandate to conduct SRC activity that serves societal need to inform its current and future SRC aspirations and programming. Capitalizing on this trajectory, Ryerson is breaking down thematic and disciplinary silos by integrating a mix of programs, faculties, and sector orientations. This approach allows for the clustering and growth of SRC activity towards enhanced SRC partnerships and opportunities for researchers and students. We are committed to a multiyear strategy to expand the quality and level of support to enhance research participation, excellence, and success.

Ryerson's SRC excellence and impact are built upon supporting our established strengths as well as identifying and incubating new, bold ideas and nascent areas of SRC activity. This strategy includes attracting top faculty, students, and staff and a sustained focus on building our SRC profile and reputational success through increased funding, greater recognition, publications, commercialization and patents, industry and community partnerships, experiential learning opportunities, and knowledge mobilization.

Role of the Office of the Vice-President, Research and Innovation in Cultivating Success

To support SRC excellence, attract and retain top talent and promote SRC impact, a key priority of the Office of the Vice-President, Research and Innovation (OVPRI) is to build collaborative partnerships across the University. This includes working with Ryerson International towards greater global SRC partnerships and initiatives and with the Yeates School of Graduate Studies in support of highly qualified personnel at the graduate and post-graduate levels. In addition, the OVPRI is strengthening the innovation ecosystem in moving from lab to market by providing various levels of support for knowledge and technology transfer and commercialization.

The OVPRI, as a shared service, fulfills a number of other important functions including:

- Providing advice and support to researchers on individual and institutional research proposals;
- Managing the development of institutional-led projects and programs and the development of institutional initiatives and strategic partnerships;
- Facilitating and ensuring compliance with federal ethics guidelines and principles of research integrity;
- Enhancing undergraduate research opportunities; and,
- Providing the required leadership and support for SRC compliance requirements.

As the funding landscape changes, the OVPRI is evolving in order to be well positioned to provide comprehensive support and encourage the stimulation of innovation through strengthened multidisciplinary connections and bigger and bolder projects and partnerships.

To enhance communication, collaboration, and alignment, as well as promote greater cross-training of employees and succession planning and respond to a changing SRC ecosystem, the OVPRI has undertaken an organizational redesign around common goals and outcomes.

The goals of the OVPRI organizational changes are to:

- Clarify roles and responsibilities
- Enhance communication and collaboration
- Strengthen client service orientation of the office
- Align governance with strategic priorities

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SRC Physical and Digital Infrastructure

The physical and virtual spaces of the institution are central to the success of our SRC growth. Progress and the growth of physical SRC infrastructure has been made with the new Centre for Urban Innovation (established in 2018) and the Daphne Cockwell Health Sciences Complex (established in 2019). Future needs will include the expansion and anchoring of science research and educational opportunities. In conjunction with the campus master planning exercise and research infrastructure funding calls, we will continue to identify new space and facility requirements that will connect research and talent development with industry, business, and community. New and renewed facilities, in turn, will increase opportunities for innovation, partnership, collaboration, and the anticipated increase of research activity and recognition.

Investment in digital infrastructure is equally vital to the expansion of SRC activity at Ryerson. The Ryerson University Library and Archives is central to the digital infrastructure required to ensure SRC innovation and success. The library provides expertise, cross-disciplinary academic perspectives, and a deep understanding of SRC needs and opportunities. It also plays a foundational role in supporting individual researchers, scholars, creators, and students and in connecting multidisciplinary research teams. In addition, it provides a rich set of resources (digital, data, textual, visual, scholarly, published and community generated) and offers the latest tools and technology-enhanced spaces necessary for the creation of new ideas, knowledge, and understanding. With expertise in research data management, open scholarship and science, intellectual property, knowledge mobilization and community outreach, the library is critical to advancing the goals of this plan. Sustained investment focussed on SRC growth and transformative digital and physical infrastructure will leverage some of the library's most successful SRC endeavours (institutional repository, open publishing, collaboratory, digital preservation, researcher communities, open researcher platform pilot) and allow expansion and creation of innovative new programs and services to meet emerging SRC priorities.

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Measuring Success
Agreed-upon measures of progress are essential for operational transparency. These measures facilitate the OVPRI's planning and decision-making processes and allow for the celebration and recognition of SRC excellence. The OVPRI will continue to work closely with the deans and associate deans of research in each faculty to co-create relevant SRC activity standards and measures for review to directly support their respective Strategic SRC Plans.

SRC success may be evaluated through a range of activities, including:

Research funding and collaboration
- Intensity of SRC activity and proportional share of external funding
- Quality and number of international partnerships, funding, and publications
- Number of collaborations and partnerships with industry, government, and non-governmental organizations
- Leadership in the development of new fields and/or multidisciplinary areas of SRC activity

Recognition
- Number of national or international SRC awards and prizes to faculty
- Number of national or international SRC awards and prizes to undergraduate and graduate students
- National and international peer review and recognition
- Periodic third-party review

Impact
- Number and quality of outputs such as peer-reviewed publications or exhibits, as appropriate to discipline
- Traditional and social media coverage
- Industrial or social innovation, including new technologies, patent applications, licensing of products and services, or other forms of knowledge transfer and adoption resulting from SRC activities
- Community benefit
- Knowledge translation and mobilization initiatives
- Visibility and reputation, measured by national and international reputational surveys

Growth
- Attract, develop, retain, and support outstanding faculty, students, and staff
- Attract and retain nationally and internationally funded postdoctoral fellows
- Cultivate SRC interest and experience for undergraduate students
- Collaborate with the Yeates School of Graduate Studies towards attracting and training high quality PhD and masters students
- Globally mobilize people and ideas through exchange, programs, and advanced research opportunities

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Strategic Research Plan Progress Review

SRC activity is a cornerstone of Ryerson University's orientation towards and commitment to the development of talent, student experience, knowledge creation and mobilization. These activities address key challenges and opportunities in the world today, through collaborations and partnerships across our region, country, and the globe.

The Strategic Research Plan is integrated and aligned with the institutional priorities set out in the University's Academic Plan, which articulates the university's vision to be Canada's leading comprehensive innovation university. SRC activity, as one of the key priorities of the Academic Plan, focuses on excellence, intensity, and impact. The Strategic Research Plan outlines how Ryerson is supporting and building SRC excellence, intensity, and impact by distinguishing key thematic areas of SRC investment and highlighting support structures.

Progress on the Strategic Research Plan will be reported through the Senate SRC Activity Committee. The Senate SRC Activity Committee has a mandate to examine and report to Senate regarding the state of SRC activity at Ryerson and upon issues regarding SRC activity that are likely to arise. Its membership, which is broadly representative of the university, includes individuals from each faculty, the library, graduate studies, the Research Ethics Board, as well as undergraduate and graduate student senators.

The Senate SRC Activity Committee has established a subcommittee, the SRC Leaders Group, which consists of the associate deans of research (or equivalent) who meet regularly to gather input and offer advice to the vice-president, research and innovation regarding strategies for enhancing SRC activity at Ryerson. The SRC Leaders Group is an active forum for exchanging information and discussing SRC activity issues and strategic planning. Its efforts support the progress of the Strategic Research Plan.

Each year, the OVPRI compiles an annual report that articulates achievements and key actions to deliver on the Strategic Research Plan. The annual report describes progress on:

- Supporting SRC excellence and increasing funding success;
- Expanding research collaborations and partnerships;
- Amplifying SRC impact, knowledge mobilization and transfer; and
- Strengthening SRC supports and systems.

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Appendix A: Strategic Research Plan Creation and Approval Process

Planning and Approval Process
The 2019-2024 Strategic Research Plan was developed through an iterative consultation process under the leadership of the OVPRI and guided by a Steering Committee with representation from each faculty and the student body. The broader university community was engaged through a series of town halls and the plan was approved via Ryerson's collegial governance framework. The Strategic Research Plan is aligned with the university's Academic Plan.

Appendix B: Canada Research Chair Allocation and Management

The allocation and management of Ryerson's CRCs is overseen by the Executive Committee for CRC Planning. Chaired by the vice-president, research and innovation, additional members include the associate vice-president, research and innovation; the provost and vice-president, academic; the vice-president, equity and community inclusion; the assistant vice-president, international; the vice-provost and dean, graduate studies; and a Ryerson University faculty member with an established research track record. The vice-provost, faculty affairs, is an ex officio member of the Committee. This Committee reports to the president of the university.

The Committee is responsible for all policies and processes relating to the management of Ryerson's CRC allocations, including strategic decisions, renewal reviews, and allocation requests. The Committee also oversees the implementation of Ryerson's Equity, Diversity, and Inclusion (EDI) Action Plan and equity targets in the CRC process.

Planned Allocation
As of fall 2018 and inclusive of the two new Tier 2 CRCs, Ryerson has an allocation of 23 Chairs: three Tier 1s and 20 Tier 2s, consisting of two CIHR Tier 1s; two CIHR Tier 2s; 12 NSERC Tier 2s; one SSHRC Tier 1; and six SSHRC Tier 2s. This breakdown includes two SSHRC Tier 2 chairs resulting from a flexible option to split one SSHRC Tier 1 into two SSHRC Tier 2 Chairs and an agency change from NSERC to CIHR.

Research Theme	Current Allocation	Pending Allocation	Planned Allocation
Urban Innovation		1	1
Justice, Equity & Society	1	2	
Culture & Creativity	2		1
Work, Skills, Industry			1
Health & Well-Being	5	1	
Technology & Intelligent Systems	7	1	

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Achieving Equity, Diversity, Access, and Inclusion
As a signatory to the Dimensions Charter and a selected Dimensions pilot institution, Ryerson is deeply committed to fostering research excellence, innovation, and creativity across all disciplines through increased equity, diversity, and inclusion.

Ryerson's EDI Action Plan, *Leading Research through Diversity*, reflects the university's core values and forms the basis for our commitment to going beyond the minimum CRC compliance requirements. Our aspirational goal is to have our faculty and staff reflect our diverse student body and community, and this is also the goal for all CRC appointments.

Commitment means that Ryerson recognizes intersectionality and intentionally incorporates equity, diversity, and inclusion into each step of the CRC hiring process. This refers to the language used in position descriptions, posting hiring advertisements widely and appropriately, unconscious bias training for hiring committees, and monitoring progress in achieving our EDI goals.

As stated in our EDI Action Plan for Canada Research Chairs, CRCs "are role models and supervisors for future researchers, colleagues who collaborate to build a community of innovation, and scholars who generate new knowledge that can have a substantial impact on lives and inspire social change." Therefore, it is critical that CRCs have a demonstrated commitment to uphold the values of equity, diversity, and inclusion in their work. For example, in response to the Calls to Action of the Truth and Reconciliation Commission, Ryerson University will seek CRCs who:

- Incorporate Indigenous knowledges and perspectives in their SRC;
- Work collaboratively with Indigenous communities and/or scholars; and
- Recruit Indigenous graduate students and postdoctoral fellows as members of their teams.

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YSGS report to Senate

In this report the Yeates School of Graduate Studies Council (YSGS Council) brings to Senate its evaluation and recommendation on the following item:

New Program Proposal

Management PhD

The PhD in Management program will be housed in and administered by the Ted Rogers School of Management. The proposal was reviewed by a Peer Review Team with a site visit on May 22 and 23, 2019 and it was highlighted that the proposed specializations align well with the University's strategic mandate agreement as well as the expertise of faculty and research areas.

On September 18, 2019 the Program and Planning Committee reviewed the proposal, PRT report and the program and YSGS responses. The documents were voted on and have been recommended for approval as sufficiently addressing the comments and recommendations of the Peer Review Team.

On September 25, 2019 the YSGS Council voted in favour of moving the proposal to Senate.

Motion: That Senate approves the new program for the PhD in Management as described in the Senate agenda.

Cory Searcy, Interim Vice-Provost & Dean, YSGS

TED ROGERS SCHOOL OF MANAGEMENT

PhD in Management
PROPOSAL

Last Updated: April12, 2019

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BASIC INFORMATION

PROGRAM GENERAL INFORMATION

The broad purpose of the PhD in Management program is to train future academic researchers with strong research design and sophisticated data analysis skills. Graduates of this program should be able to carry out rigorous research design and intellectual contributions produced by students will demonstrate the Ted Rogers School of Management's commitment to impact, engagement, and relevance. Students will conduct research projects informed by current industry trends and issues and with objectives to make policy recommendations and offer meaningful and implementable solutions to complex issues that are significant for the industry and society.

1.a.i. Name of the Program and the Proposed Degree Designation(s)

PhD in Management

1.a.ii. Identification of the Designated Academic Unit

The proposed PhD in Management will be housed within the Ted Rogers School of Management (hereafter TRSM).

1.a.iii. Program Governance Structure

The TRSM Graduate Program Council (GPC) and its subcommittees govern all graduate programs housed within TRSM and will bring in the proposed PhD in Management under its jurisdiction.

The by-laws define the mandate of the council: "Students and faculty are partners in ensuring the successful functioning of graduate programs at Ryerson University. The GPC is the principal mechanism for bringing together these two constituencies to identify, discuss and address matters relating to that graduate program".[1]

The TRSM GPC contains representatives of faculty, elected from the members of the Yeates School of Graduate Studies (YSGS), faculty who teach courses in the Master of Business administration (MBA), Master of Science in Management (MScM), and Master of Health Administration (Community Care) (MHA (CC)) programs, and the Graduate Program Directors. Motions that affect only graduate programs within TRSM can be ratified by the TRSM GPC, while those with an impact outside the graduate programs are recommendations subject to approval by the TRSM Faculty Council and the YSGS Graduate Council, and subsequently Ryerson Senate.

The TRSM GPC will have primary responsibility for:

- coordinating program curriculum development;

[1] "Graduate Program Council By-laws TRSM", June 2015, p.2
http://www.ryerson.ca/content/dam/senate/YSGSReports/2014-2015/Bylaws/TRSM%20GPC%20Bylaws%202015.pdf

- ensuring the quality, currency, and content of constituent courses;
- undertaking the ongoing review of program objectives, learning outcomes, and career competencies, and Ryerson's Institutional Quality Assurance policies and the collaborative governance model will govern this PhD in Management. These policies include, among others:

    - Policy 110: Institutional Quality Assurance Process
    - Policy 112: Development of New Graduate and Undergraduate Programs
    - Policy 126: Periodic Program Review of Graduate and Undergraduate Programs
    - Policy 127: Curriculum Modifications: Graduate and Undergraduate Programs
    - Policy 163: Graduate Admissions Policy
    - Policy 164: Graduate Status, Enrolment, and Evaluation

The policies referenced above can be found on the Ryerson University, Senate Office website.[2]

1.a.iv. Principal Faculty Members involved in Proposal Development

The principal faculty members involved in the development of the proposed PhD in Management include:

Leadership Team:

Dr. Kelly MacKay	Vice-Provost Academic, Ryerson University (previously Associate Dean Research and Graduate Programs, TRSM)
Dr. Hong Yu	Interim Associate Dean Research and Graduate Programs, TRSM
Dr. Daphne Taras	Dean, Ted Rogers School of Management

PhD in Management Brainstorming Committee:

Dr. Deborah Fels	Professor, Information Technology Management and Director of the Inclusive Media and Design Centre
Dr. Murtaza Haider	Interim Director and Associate Professor, Real Estate Management
Dr. André Laplume	Associate Professor, Entrepreneurship and Strategy
Dr. Ojelanki Ngwenyama	Professor, Global Management Studies and Director of the Institute of Innovation and Technology Management
Dr. Sergiy Rakhmayil	Associate Professor, Finance
Dr. Dogan Tirtiroglu	Associate Professor, Real Estate Management
Dr. Ozgur Turetken	Director and Professor, Information Technology Management
Dr. Morteza Zihayat	Assistant Professor, Information Technology Management
Dr. Hossein Zolfagharinia	Assistant Professor, Global Management Studies

Staff Support Personnel:

Mr. Nik Ashton	Research Support Specialist, TRSM
Mr. Ben Samms	Decision Support Analyst, TRSM
Ms. Cindy Dunne	Director, Strategic Initiatives and Accreditations, TRSM

[2] https://www.ryerson.ca/senate/PoliciesNmbr/

1.b. PROGRAM OVERVIEW

1.b.i. Program Rationale

The proposed PhD in Management program is designed to meet the demand by institutions for high quality researchers with a background in Management. Students will be given the opportunity to generate management oriented knowledge through exposure to and participation in academic research with a specialized discipline-specific application. Program graduates will be equipped to disseminate such knowledge to their research community, industry, government, and the public at large.

Further, building upon TRSM's existing long standing industry relationships, the proposed PhD program will provide new collaborative research opportunities that will enable faculty and PhD candidates to provide industry with relevant research outcomes such as data, analysis and models that will enable better strategic decision making.

The focus of the proposed PhD in Management program is to carry out rigorous scientific research about complex management problems in a rapidly changing and globally-oriented economy. The program is designed to develop graduates who are skilled in research that includes a theoretical and practical understanding of the challenges that organizations experience, and who are able to disseminate that research in appropriate venues.

The proposed PhD in Management is similar in structure to other research oriented PhD programs, but unique due to the specializations proposed and the interdisciplinary nature of them. Specifically, we propose four interdisciplinary specializations in the PhD in Management program:

- Digital Enterprise and Social Media
- Real Estate Studies
- Retail and Consumer Services
- Strategy, Innovation and Entrepreneurship

A review of comparator institutions reveals that most tend to have a more traditional disciplinary orientation that follows departmental structures typically seen in business schools. For example, Human Resources and Organizational Behaviour is the most popular specialization offered among Canadian institutions accounting for 15% of specializations. Finance (12%), Marketing (12%) and Accounting (10%) are also offered at many schools. See Appendix A for a Comparator School Market Scan of PhD specializations and SWOT.

Proposed Specialization Descriptions:

Digital Enterprise and Social Media

This specialization will provide students with a deep understanding of the theories, practices, techniques, tools and issues surrounding such digital transformation of organizations into "digital enterprises" ready to operate in the "digital ecosystem". Digital enterprises need members who are well versed in the functionality and integration of widely used technologies such as enterprise wide systems, database systems, local area networks, artificial intelligence, analytics, big data, cloud computing, social media and useful and usable user interfaces and experience.

As a natural extension, students will pursue discovery and knowledge in one of the most salient changes in the way digital enterprises operate, which can be broadly referred to as “Networked Workers”; a novel notion that recognizes networked workers and how they operate within multiple networks that are internal and external, formal and informal, online and offline while relying on social media and mobile technologies.

Additionally, students in the specialization will examine enterprise architecture, the analysis of the broad set of stakeholders, and management of their interactions with each other and with the digital technology underlying the whole enterprise. Another important topic in the digital enterprise is the issue of information systems security and privacy management (ISSPM), which requires a broad set of subject matter expertise ranging from established domain of IT security management to emerging topics such as Big Data security, Internet of Things, and blockchain technology.

Real Estate Studies

This specialization focuses on real estate management, finance and economics. The specialization will focus on all aspects of commercial and residential real estate assets and markets. The specialization will offer specialized coursework in real estate markets, sustainability, specialized topics in real estate and advanced financial econometrics.

Historically, residential real estate markets and assets have been the focus area of the graduate and undergraduate real estate programs all over the world. Asset valuation, marketing of property via the multiple listing services and the ensuing agency problems, and development/construction and property management have been the main topics under this domain. In addition, recent developments in option-theoretic analyses and technological advances, such as information technology and its impact on the availability of real estate information around the world, have become integral components of this domain.

Currently, academics have put far more emphasis on commercial real estate assets, both real and financial. Real Estate Investment Trusts have become a key industry in the USA and also begun to dominate a number of markets internationally. Pricing of mortgage-backed securities, which is very complex and mathematical, and development of the real estate price indexes have become cutting edge research topics and avenues for commercial interest and policymaking. Certainly, the key driver of the Global Financial Crisis has been the massive problems in the real estate sector. Both the academia and the industry are still researching the root causes of GFC problems as well as the prescriptions against such disasters in the future.

Given this background, the Real Estate Studies specialization will offer students a rich menu of diverse research topics, opportunities and collaborations. The Ted Rogers School of Management has a wealth of research competencies, accomplishments, aspirations and networking possibilities that will lead to unique and substantial research contributions in a Canadian and international context.

Retail and Consumer Services

The specialization area of Retail and Consumer Services (RCS) intersects the dynamic interplay of retail operations and consumer behavior. In this focus area, the objective is to understand the dynamics in which retail services and operations influence consumer attitudes and behaviours, and how consumer psychology and preferences influence retail strategies and decisions.

In this specialization, core areas will include omni-channel operations, service quality and leadership, retail branding, technology development and utilization, human resource management, and firm infrastructure. As retailers fight for growth in the new world of physical, digital and mobile shopping, their ability to provide a

consistent service level across all channels has become the essence of omni-channel retailing, a field that has not been thoroughly researched. Research on service leadership and human resource management will investigate relationships between profitability, customers and employees. As the Canadian retail sector facing intensified competitions, research into how to integrate product innovation, retail environment and service designs into competitive retail branding strategies will contribute to new knowledge discoveries and also provide practical implications. By seeking to understand the factors that influence the level of adoption and use of retail technologies (i.e., mobile wallet and wearable technologies), interventions can be designed to help users progress to a more advanced level of use, the financial community and retailers will be better informed with regards to the areas and needed of future investments. A critical element of firm infrastructure research is on innovation as a driver of performance in retailer-vendor strategic partnerships, which are a centre for value creation in the supply chain and result in profitability for partners and value for customers.

Strategy, Innovation and Entrepreneurship

Strategy, Innovation and Entrepreneurship is a fast growing and broad-reaching and multi-disciplinary academic area. *The Academy of Management* provides separate descriptions, which provide a good starting point to address the focus on combining disciplines.[3]

This specialization examines three domains that are highly interconnected:

Strategy relates to the processes and mechanisms that influence/drive a firm's success in comparison with others. Firms seek to gain sustainable competitive advantage and innovation is often a central driver. Innovation helps firms enter new markets and increase profit margins. Firms must not only be innovative but to have sustainable competitive advantage must do so better than their current competitors and create barriers to entry for potential new competitors in order to maintain a competitive advantage. The track will discuss technology strategy and firm performance (the 'content' of technology strategy), how technology strategies develop in firms (the 'process' of technology strategy), and how technology strategy is related to organizational and environmental factors (the 'context' of technology strategy).

Innovation Management encourages interdisciplinary scholarship and dialogue on the management of innovation and technological change from a variety of perspectives, including strategic, managerial, behavioral, and operational issues. The problem domain includes the management of innovation processes, research and development, information technologies, e-commerce, and process technologies.

Entrepreneurship is the actors, actions, resources, environmental influences and outcomes associated with the emergence of entrepreneurial opportunities and/or new economic activities in multiple organizational contexts. The focus is on the characteristics, actions, and challenges of owner-managers and their businesses.

1.b.ii. Societal Need

Located in downtown Toronto, TRSM is uniquely positioned in Canada's corporate epicenter. Toronto serves as the headquarters to Canada's financial institutions and the headquarters of many multinational

[3] http://aom.org/Divisions-and-Interest-Groups/Academy-of-Management-Division---Interest-Group-Domain-Statements.aspx

corporations. Recently, the *Global Financial Centres Index* ranked Toronto as the 8th most influential financial centre and second-highest ranking North American city.[4]

Toronto's economy is highly diversified with emerging leadership in communications technology, design, higher education, arts, fashion, business and retail services, environmental innovation, food services, and tourism. TRSM's location allows for more timely and effective partnerships with local organizations in informing and supporting research that will both make a theoretical contribution and deliver practical implications that can benefit those organizations.

Having a PhD in Management is an integral part of being a top business school, particularly in top research universities. A recent landmark report titled, "Sustaining Scholarship in Business Schools," co-authored by members of the *Association to Advance Collegiate Schools of Business* (AACSB) *International Management Education Task Force*, identifies an emerging doctoral faculty shortage in business fields as the most pressing issue facing management education.[5] Introducing a doctoral program will boost the (inter)national reputation of TRSM when its doctoral graduates are placed in universities and major profit and non-profit organizations around the world. The research activities of doctoral students will significantly improve the research culture of the management school. The opportunity to work with doctoral students will make it easier to recruit top-quality research faculty, increase faculty job satisfaction and, therefore, improve faculty retention.

The Strategic Mandate Agreement (SMA), set forth by Ryerson University recognizes a number of areas of program strength that are intended to inform program approvals and the proposed PhD in Management and specializations are closely aligned with the University's aspirations to expand such program strengths. In particular, the program areas closely aligned with this proposal include: Digital Economy; Innovation and Entrepreneurship; and Management and Competitiveness. The program is an integral part of the vision and strategic plan to make TRSM a world class business school with high quality programs at multiple levels, as well as a school known for thought leadership and diversity, with multiple vibrant communities clustered around different programs. A PhD in Management program will solidify TRSM's place as one of the top ten business schools in Canada.

With the growing complexity of the global economy, there is not only a societal need for highly trained talent to advance knowledge and its applications, but also a market need for expertise in key sectors of the evolving business world to drive growth and competitiveness. A well-documented shortage of academically qualified (PhD) business faculty has developed over the last two decades, and is expected to worsen in the future. Specifically, Association to Advance Collegiate Schools of Business (AACSB) estimated the excess of demand over supply in the United States at 1,000 in 2008 and projected that the shortage could more than double by the next decade. Among the most commonly cited reasons for the shortfall in business faculty are stunted investment in doctoral programs (in terms of availability and student financial support), growth in undergraduate and MBA programs around the world, and anticipated faculty retirements. But, growth in PhD production is not uniform across the world. Countries with already high levels of doctorate production – for example Germany, Canada, the United States and the United Kingdom – are growing at around 5% or less, while fast-developing countries are growing doctoral output at more than 7%, such as Mexico (17%) and China (40%).[6] Nevertheless, the AACSB data suggest that, in terms of absolute numbers and percentage of total faculty size, anticipated short-term faculty needs, current

[4] https://www.longfinance.net/programmes/financial-centre-futures/global-financial-centres-index/media-coverage/

[5] https://www.aacsb.edu/-/media/aacsb/publications/research-reports/the-promise-of-business-doctoral-education.ashx?la=en

[6] Chestnut Consulting Report "Market Scan for PhD in Management" June, 2017

unfilled positions, and anticipated retirements in the next five years are all consistently higher for Management.[7]

We note, however, the stark headlines, regarding the lack of demand for the PhD degree and subsequent employment in Canada over the years -- (for example, "*When PhDs realize they won't be professors, in Canada," "In Canada you can get a PhD but maybe not a job,"* "*Earning a PhD in Canada likely to provide modest returns"*).[8] Yet, less than one per cent of Canada's population holds a PhD degree. That is low in comparison to other developed countries.

Although 60 per cent of PhD students in all disciplines begin their studies aiming to become university professors, the number of PhDs held and granted in Canada far exceeds available academic positions. In general, only a minority of PhD earners will obtain a faculty position. Less than 40 per cent of Canada's PhD earners are employed in the post-secondary education sector in some capacity – as full or part-time university professors, research and teaching assistants, full or part-time college instructors or postdoctoral scholars. But many of these positions are temporary or transitional. In fact, only 18.6 per cent of PhD earners are employed as full-time university professors in Canada, and fewer still hold tenured or tenure-track positions.[9]

Indeed, according to the 2011 *Conference Board of Canada Report Card*, the number of Canadian PhD degrees granted lags behind all but one country in a 15-nation peer group. While there has been significant growth in the numbers of PhDs granted by Canadian universities, increasing by 68 per cent between 2002 and 2011, countries such as the U.S., U.K., Finland and Sweden produce more than twice as many PhD degree holders per capita as Canada.

The statistics may be significantly more advantageous for those holding a PhD in Management. A recent survey by the University of British Columbia showed that its business post doctorates are by far the most likely to be employed in higher education (88 %). Furthermore, current listings of higher education employment opportunities show a multitude of Canadian and international faculty vacancies across all specializations proposed by Ryerson's PhD in Management program. However, with more than three-fifths of PhDs employed in diverse careers outside the academy—in industry, government, and non-government organizations, there is still a great need to continue to promote the value of a PhD degree as an essential component of the knowledge-based economy.[10]

It is estimated that Canada may need as many as 17,000 PhD holding job-seekers annually to fill key positions across the economy.[11]Additionally, 2016 Canadian census data show that more than one-half (58%) of earned doctorates are in Science, Technology, Engineering and Math (STEM) fields whereas doctoral degrees in management fields are considerably fewer, making up less than 3% of earned doctorates. Additionally, men with a doctorate in management earn an average of $142,100, more than men with a doctorate in any other field. Women with a doctorate in management and related studies earn an average of $127,700, comparable to women with a doctorate in law and more than women with a doctorate in any other field of study.[12] Approximately two-thirds (64%) of people with a doctorate in

[7] https://www.aacsb.edu/-/media/aacsb/publications/research-reports/the-promise-of-business-doctoral-education.ashx?la=en

[8] https://www.macleans.ca/work/jobs/phds-realize-they-wont-be-professors-now-what/

[9] http://www.conferenceboard.ca/e-library/abstract.aspx?did=7632

[10] http://outcomes.grad.ubc.ca/docs/UBC_PhD_Career_Outcomes_April2017.pdf

[11] https://www.conferenceboard.ca/press/newsrelease/15-11-24/Where_Are_Canada_s_PhDs_employed.aspx

[12] https://www150.statcan.gc.ca/n1/pub/75-006-x/2018001/article/54978-eng.htm

management work as university professors and an additional 13% in "other" positions in academia such as lecturers, researchers, college instructors and administrators.[13]

With education, along with innovation, emerging as a key theme for the current federal government, Ryerson's proposed PhD in Management program is well positioned to address the unmet need in producing highly-educated researchers with subject matter expertise as well as advanced analytical and problem-solving skills. The need for skills and knowledge in Canada has never been stronger. In the fiscal year 2017, the federal government earmarked $425 million to enable institutions and their best researchers to:

- Conduct world-class research in areas of strategic institutional priority;
- Enhance research capacity by forging productive partnerships within and among institutions; sectors and disciplines for the effective and sustainable use of the research infrastructure and facilities; and
- Generate social, health, environmental and/or economic benefits for Canadians, including better training and improved skills for highly qualified personnel, through appropriate pathways

The federal innovation plan includes an innovation-based economic development strategy that will enable Canada to stay competitive in a global economy. The focus on innovation nationally, speaks to a demand for people with advanced training in Management and Entrepreneurship and is part of the motivation for proposing a new PhD degree in Management at TRSM.

The proposed doctoral program recognizes the highly competitive landscape for a career as an academic. This program is designed to produce academic researchers with strong research design and sophisticated data analysis skills. Students will study issues that are significant for industry and society, and this program will indeed prepare graduates for a wide range of career paths within academia, industry, or both. Subsequently, in terms of purpose, the most significant point of differentiation with the proposed PhD in Management is ensuring the program is intended for individuals aspiring to a professor, researcher, and/or administrator role in an academic setting, or for practitioners interested in advancing their careers by developing their research capabilities. For example, graduates of the Real Estate Studies specialization will likely encounter equally good career prospects in industry as within the academy. Regardless, the problem-framing, research, and data analysis skills fostered through a doctoral program are valued in roles beyond the boundaries of the higher education domain. A vast majority (84.2 %) of Canadian PhD earners are interested in learning more about non-academic career opportunities. [14]

TRSM is well suited to produce the country's next generation of global innovators and leaders. Drawing on its faculty's skills as researchers and critical thinkers and enabled by their studies in the relevant and exciting proposed PhD in Management specializations, TRSM PhD graduates will be uniquely positioned to contribute to knowledge discoveries, improve policy, organizational performance, innovation and economic and social issues facing management. Graduates of the TRSM PhD in Management will graduate into a complex, global labour market with new opportunities for work beyond Canada's borders. We envision that the graduates of the proposed program will pursue academic and industry-based career opportunities domestically and abroad. Opportunities may include teaching positions at colleges and polytechnics, where advanced degrees are increasingly the norm. Outside of academia, new industries continue to emerge, in emerging fields like business analytics, social media, and digital enterprise.

The potential for TRSM Management PhDs to contribute through their research framing, data collection, analysis, and interpretation and generalization skills is highly desirable – whether they find careers within

[13] http://www.heqco.ca/SiteCollectionDocuments/Ontario's-PhD-Graduates-from-2009-ENG.pdf

[14] http://www.cihr.gc.ca/e/48761.html

the incubator and accelerator companies that support start-ups and new ventures; or at banks and hospitals recruiting talent with technology-business hybrid skill sets; or with businesses looking to implement enterprise- wide systems in order to operate in the digital ecosystem.

Specializations and Societal Need

Digital Enterprise and Social Media

There is enough evidence (e.g. big banks and hospitals recruiting postdocs with technology-business hybrid skill sets) to suggest that there will be reasonable demand for this specialization both among traditional graduate students and working professionals who are in need of transforming their careers to be part of the digital transformation.

Digital enterprises are enabled through enterprise architecture, driven by big data and analytics, and secured by information security policies and techniques. Our specialization will emphasize all three of these pillars that are of utmost relevance to organizations and society in general. In addition, we will emphasize topics at the interactions between these pillars such as robotic process automation (big data and enterprise architecture), fraud analytics (information security and analytics), and privacy by design (enterprise architecture and information security).

Another salient aspect of the digital enterprise is the ubiquitous and social computing. By 2018, 70% of the workforce will be using tablets (Gartner, 2015). Mobile devices have become more sophisticated with high computing capabilities allowing users to have instant interaction with applications of their choice. Social networking is a phenomenon that is proliferating at an incredible pace. Social networks have become widely used, and affected the way people get and share information about politics, news, health, and finances among others. There are a variety of well-known social networking tools such as blogs, social networking sites (e.g. Facebook), virtual social worlds (e.g. Second Life), collaborative projects (e.g. Wikipedia), content communities (e.g. YouTube), and virtual game worlds (e.g. World of Warcraft). Yet, despite the increase in interest and adoption of social media by organizations, the implications of these new technologies on the bottom line are not yet well established in scholarly literature, which is what this specialization aims to address.

Real Estate Studies

Since real estate, especially housing markets, has emerged as one of the primary societal concerns, and by virtue of the trillion plus dollar debt in residential mortgages alone, the financial risk in capital markets has appeared as a heightened concern for governments and lenders of all sizes.

A PhD specialization in Real Estate studies will produce the much desired human capital required to serve the market need for scholars/educators, senior analysts, investment and portfolio managers, and senior public servants to support evidence-based decision-making to lower market risks and to facilitate growth in real estate assets.

Downtown Toronto serves as the informal hub for real estate markets in Canada. Most large investors in all classes of real estate, market research firms focusing on real estate, institutional and boutique lenders in real estate markets, and the central offices of large brokerages and the representatives of real estate boards are concentrated in and around downtown Toronto. Given the large workforce of mid-to-senior level managers active in the real estate markets within walking distance of TRSM, the PhD specialization in Real Estate Studies is well positioned to attract mature students with experience in real estate markets and access to proprietary data/knowledge. At the same time, as the MScM program at TRSM grows, the alumni of the research

Master's will also contribute to the demand for doctoral studies, specializing in real estate. The Real Estate Management Department has been in a partnership with REALPAC - the national leadership real estate association dedicated to advancing the long-term vitality of Canada's real property sector – in holding annually the REALPAC / Ryerson Commercial Real Estate Research Symposium. This symposium brings together academics and practitioners and offers a platform to produce knowledge and share it among the real estate society and the society at large. The Real Estate Management Department is unique as it is the only stand-alone department of its kind in Canada and endowed with diverse, internationally well-respected and highly productive human capital across several real estate sub-fields.

Retail and Consumer Services

In a 2017 study conducted by *Retail Insider,* it was predicted that 2017 would be a "slow year for retail expansion" in Canada, however, this prediction proved incorrect, and more than 50 international brands entered Canada by opening stores or concessions. While this is excellent news for the sector, it also represents competition that could see more local/Canadian retailers struggle. For retailers operating in Canada, things are changing quickly — consumer tastes are changing, the cost of living is skyrocketing in some markets, technology and e-commerce continue to take hold, and those who do not adapt risk dying. There will no doubt be more store closures in Canada in 2018, after some unfortunate bankruptcies that took place last year.[15]

Another trend in the industry, will undoubtedly be the continued growth in e-commerce as a percentage of overall retail sales, though it still remains well below 10% of all Canadian retail purchases. Consumers continue to demand online shopping options and leading retailers are addressing this by improving their online experience. New technologies continue to shape customer demands and retailers are hard-pressed to keep up with this evolving culture. Canadian shoppers are already thinking and shopping in omni-channel dimensions, and so retailers are looking to change their model into a personalized approach to better meet ongoing expectations and, ultimately, enhance the customer experience. Omni-channel retailing has become the gold standard for success in the retail environment - the goal that everyone is supposed to be aiming for but few know how to achieve. It provides a seamless, continuous customer experience across any device or location a customer wishes to shop, with a personalized brand experience. Developing an omni-channel strategy is a process that businesses embark upon, and that process can be made easier through connectivity. Some formerly pure-play e-commerce brands have gone on to open physical retail stores with considerable success, supporting the notion that a hybrid or 'omni-channel' model is desirable.[16]

The retail market in Canada is changing rapidly. The battle for customer loyalty is intensifying, as digital transformation, changing consumer behaviour, and new entrants to the market disrupt the industry across all subsectors. Unique within our country, the Ted Rogers School of Management is best positioned to develop future scholars and leaders for innovation in retailing.

Strategy, Innovation and Entrepreneurship

TRSM offers one of Canada's leading Entrepreneurship programs with a large dedicated faculty. TRSM teaches more undergraduate entrepreneurship courses than any other English language university in Canada.

[15] https://www.retail-insider.com/retail-insider/2018/1/2018-canadian-retail-forecast-analysis

[16] https://www.pwc.com/ca/en/industries/retail-consumer/publications/consumer-markets-deals-insights-2017-recap-and-2018-outlook.html

Innovation and entrepreneurship is a critical element of government policy at both Federal and Provincial level, providing good opportunities for research support and funding.

For example, the Government of Canada's Innovation Agenda identifies six areas of action:

- Promoting an entrepreneurial and creative society
- Supporting global science excellence
- Building world-leading clusters and partnerships
- Growing companies and accelerating clean growth
- Competing in a digital world
- Improving ease of doing business

The Ontario Government's Innovation Agenda has these goals:

- Extract more value from all provincial investments in research and innovation
  Attract the best and brightest innovators and entrepreneurs from around the world and keep homegrown talent here
- Invest in, generate and attract a workforce with first-rate skills in science, engineering, creative arts, business and entrepreneurship
- Stimulate increased private-sector investment in knowledge-based companies and capital that boosts productivity
- Be globally recognized as a commerce-friendly jurisdiction that supports the growth of innovative companies and activities

The proposed concentration in Strategy, Innovation and Entrepreneurship addresses and supports the majority of these action areas and goals both federally and provincially.

A strong demand exists for PhDs with this specialization. Most academic jobsites list a number of entrepreneurship vacancies (for example, HigherEd Jobs lists 64 current openings, and at least six Canadian universities have current vacancies).[17] In addition, there are many opportunities in a variety of other areas (research groups, incubators/accelerators, etc.).

Evidence of a societal need can be seen almost daily in the business press and the popular press. By bringing the strategic concept into the specialization, we hope to generate research with organizations that span the corporate, capital market and government sectors. The recent announcement of federal level funding for artificial intelligence and the need to develop centres of excellence in Canada suggest that the threats to business models are real, and recognized at the top levels of government in Canada. With so much attention being paid to the start-up sector, and yet so much capital invested in the "old" economy, the issue of disruption is an area that needs to be addressed. Ryerson, with its strengths in innovation and start-ups, should be a contributor in this area.

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https://www.higheredjobs.com/search/advanced_action.cfm?Remote=&Keyword=entrepreneurship&PosType=&InstType=&JobCat=&Region=0&SubRegions=&Metros=&OnlyTitle=0&StartRow=-1&SortBy=1&NumJobs=25&filtercat=255&CatType=3

1.b.iii. Anticipated Student Demand

Recognizing the theoretical and applied nature of management research and education, and the realities of academic career opportunities for PhD holders, this PhD in Management would include two modes of study:

1. *Full-time track* intended for those planning to pursue a career in the academic, government, and corporate sectors. Advanced studies in management and management research is informed by the reality of business, and candidates for this PhD program will see theories learned enacted in the practice of business. In addition to collaborating with faculty colleagues on original research, potential students of the proposed PhD in Management may also be attracted to opportunities in teaching undergraduate students, and advising leaders of industry and public policy.
2. *Part-time track* intended for those who are already working in a company/professional career - for persons with professional experience looking to a change in career path and/or apply relevant knowledge and research skills to contemporary business problems in their industry or workplace.

Students will be recruited for the PhD in Management program from within TRSM, nationally, and internationally. We anticipate that TRSM PhD students will come from a variety of backgrounds, with many returning to school for further education after spending time as professionals.

An enrolment of approximately six students (full-time equivalent or FTE) per year is anticipated. Faculty and Graduate Program Administrators have already fielded a number of inquiries requesting information regarding the proposed program. These solicitations have occurred via email, in response to the posted Letter of Intent (LOI), and in-person from current MScM students and alumni.

Application data provided by the Graduate Management Admissions Council shows that 60% of Management doctoral graduates were working prior to enrolling in their doctoral program, indicating that the majority of those interested in pursuing a PhD in Management were working professionals.[18]

Additionally, we anticipate strong international demand for the program. Almost 30% of doctoral students in Canada are non-Canadians and Toronto is a major centre for attracting international students. In a recent survey of 19 Canadian universities, there is indication that applications for PhD programs are on the rise.[19]

With only one other Canadian institution, Carleton University, offering a part-time program for a PhD in Management, there is opportunity for TRSM to attract prospective students looking for a flexible program.

1.b.iv. Comparator Programs

TRSM is the only top 10 rated business school in Canada not to offer a PhD in Management or Business Administration. At the cutting edge of entrepreneurial, socially-conscious and innovative approaches to business, TRSM is well positioned to differentiate its PhD in Management program from other more traditional programs and institutions that focus mainly on basic research and placing their graduates in academia. Twenty-two universities in Canada currently offer a PhD in Management (or Business Administration or Management Science) program. On average, Canadian institutions with a PhD in Management program offer six specializations. While the Ivey Business School at the Western University and HEC Montreal offer the most specializations with 12 and 11 areas of study respectively, the Asper

[18] Chestnut Consulting Report "Market Scan for PhD in Management" June, 2017
[19] Ibid

School of Business at the University of Manitoba, the University of Guelph and the University of Waterloo offer the fewest options with three specializations each.

The proposed specialization areas align with TRSM's mission of offering relevant curricula that are cutting edge, yet practical. While each of the proposed specializations falls into a traditional area of business/management study (for example, Strategy or Information Systems), each proposed specialization is uniquely tailored to explore the current, emerging and evolving conditions, challenges and trends of today's business world.

Key local competitors to TRSM in Toronto (including the University of Toronto's Rotman School of Management and the Schulich School of Business at York University in Toronto and the De Groote School of Business at McMaster University and Wilfred Laurier University just outside the city) all offer a PhD in Management program. However, the focus and end goal of all four programs is research and a career in academia. TRSM differentiates its proposed PhD in Management program by its novel and somewhat unique areas of study and its approach to PhD training in exposing students to not only traditional research methods but also novel techniques such as big data analytics that some contemporary management problems call for.

A market scan of PhD programs in Canada reveals the following about program specializations proposed for TRSM's PhD and program specializations offered at other institutions:

Digital Enterprise and Social Media - Twelve business schools in Canada offer specializations in the area of Information Systems. However, PhD programs in Ontario are more heavily focused on traditional business domains and mostly with social science oriented paradigms. While there are a number of computer science PhD programs and specializations (notably at the University of Toronto and University of Waterloo) trying to tackle problems and areas similar to those proposed by TRSM's Digital Enterprise specialization, their angle is purely technical, whereas TRSM's approach is from an IT management perspective.[20]

Currently 16 business schools across Canada offer specializations in the area of Human Resources and Organizational Behaviour within a PhD in Management Program. TRSM's proposed specialization is unique as its offering focuses on the growing role of social media and related technologies in leading and shaping the change in the way organizations operate and facilitate networked work.[21]

Real Estate Studies - Only one graduate program with a focus on real estate markets currently exists in Canada – the Sauder School of Business at the University of British Columbia offers Urban Land Economics as a specialization in its PhD in Business Administration program.[22]

Retail & Consumer Services - Sixteen of 22 PhD in Management programs in Canada offer a specialization in Marketing. However, none of these programs are specific to the retail sector[23], a focused retail and customer service approach beyond the scope of marketing management.

Strategy, Innovation and Entrepreneurship - Ten Canadian schools offer a PhD specialization in Strategy (including local competitors, the Rotman School of Management and the Schulich School of Business), focusing primarily on strategic management, strategic policy or strategic organizations.[24] Two of the 10

[20] Ibid
[21] Ibid
[22] Ibid
[23] Ibid
[24] Chestnut Consulting Report "Market Scan for PhD in Management" June, 2017

schools (Sobey and Asper Schools of Management) offer the specialization within a broader specialization of Business Administration.

A review of program specialization summaries suggests that most schools are focusing on how business leaders analyze company operations, with the goal of business integration across departments and functions.

Unique to the TRSM proposed specialization, is the understanding of how organizational leaders deal with disruptive trends, evaluate opportunities and threats and define new operating models. The focus will be on understanding how organizations, particularly start-ups, respond to disruptive market entrants and innovations.

The Haskayne School of Business at the University of Calgary is the only school that couples a specialization in Entrepreneurship with Innovation (Business Environment, Entrepreneurship and Innovation). Although the Telfer School of Management at the University of Ottawa and the Ivey Business School at Western University both offer a specialization in Entrepreneurship, their focus is general with little mention of innovation. Local competitors, the Rotman School of Management, the Schulich School of Business at York University and the De Groote School of Business at McMaster University, do not have an offering in this area.[25]

Global Comparison

Similar schools in Canadian, American and international institutions with a PhD in Management program offer an average of six specializations. However, European schools offer fewer specializations with an average of three per school. Of the 22 international schools surveyed, the Fox School of Business at Temple University offered the most specializations (11), while the Cranfield School of Management at Cranfield University promoted no specializations.

The top five specializations offered are Human Resources and Organizational Behaviour (15%), Other (15%), Accounting (12%), Marketing (11%) and Finance (10%). These top specializations are similar to Canada with the exception of the "Other" category. Schools outside of Canada offer a number of unique specializations including Decision Neuroscience, Hospitality and Tourism Management, Sports Management, Design and Innovation, Ethics, Statistics, Risk Management and Insurance, Work, Industrial and Employment Relations, Science, Technology and Innovation Policy and Maritime Studies.[26]

Unlike Canadian universities, for half of the European schools surveyed, the various study areas are offered as stand-alone PhD programs as opposed to specializations. For example, the Henley School of Business at the University of Reading in the United Kingdom offers a PhD in Marketing Reputation, a PhD in Finance and Capital Markets and a PhD in Real Estate Planning among other business/management-oriented PhD programs.

1.b.v. Program alignment with Academic Plan(s)

Ryerson's mission: "The special mission of Ryerson University is the advancement of applied knowledge and research to address societal need, and the provision of programs of study that provide a balance between theory and application and that prepare students for careers in professional and quasi professional fields".[27]

[25] Ibid

[26] Chestnut Consulting Report "Market Scan for PhD in Management" June, 2017

[27] https://www.ryerson.ca/about/accountability/mission/

Ryerson has earned a reputation for high quality, professional and career related research and education and its programs are in high demand. The proposed PhD in Management will stay true to our history with an emphasis on research with relevance to tackle complex issues in industry and society. In order to differentiate ourselves from other doctoral programs in the Greater Toronto Area (GTA), Ontario, and Canada, we are proposing specialization areas that draw on our expertise and deep connections to industry, government, and professional practices to drive innovation in the management field.

The proposed program's specializations include:

- Digital Enterprise and Social Media
- Real Estate Studies
- Retail and Consumer Services
- Strategy, Innovation and Entrepreneurship

The proposed PhD in Management is highly consistent with Ryerson's mission and Academic Plan, *Our Time to Lead"*[28] and its priorities as noted below. As a comprehensive university, doctoral education is imperative to Ryerson's mission and addressing its four priority areas.

Enable greater student engagement and success through exceptional experiences:

The proposed PhD in Management program will provide students with access to a terminal degree in management, expose undergraduate and Master's students to doctoral studies, and augments the number of graduate programs in TRSM. Specifically, the proposed program will inspire the students in the Master of Science in Management, MBA in Management of Technology and Innovation, MBA Global, and Master of Health administration (Community Care) toward higher educational levels.

Increase Scholarly Research and Creative excellence, intensity and impact:

The addition of a doctoral program will enable an increase in excellence, intensity, and impact of scholarly research and intellectual contributions by providing increased resources for scholarly works, improving the ability to attract and retain high quality faculty, and the subsequently associated productivity and reputational boost. The proposed doctoral program represents a commitment to and an investment in research excellence, thereby generating positive reputational capital.

Offering a doctoral program in TRSM will enhance our ability to attract and retain highly research active faculty. While TRSM faculty are already highly productive in terms of scholarship, the investment in new faculty, research resources, and graduate assistants associated with the PhD program will help to increase the quality and quantity of research output from TRSM, further enhancing our standing in the academic community.

[28] https://www.ryerson.ca/provost/academic-plan/

Foster an innovation ecosystem:

Ryerson University and TRSM play a major role in the large network of established companies, start-ups and public and private organizations that work together to stimulate innovation, develop new technologies and expand employment opportunities globally.

As noted in *Our Time to Lead,* innovation depends on diversity of experience and thought. TRSM is, arguably, Canada's most diverse business school in terms of student body, faculty composition and collaboration. Faculty members routinely engage in international research collaborations, with 62% of our faculty conducting research across a total of 51 countries; 63% of our faculty attained their academic credentials outside of Canada and 48% were born outside of Canada.[29]

TRSM faculty members have research competence and disciplinary backgrounds in areas not traditionally seen in business schools (e.g., law, philosophy, engineering, computer science, geography, and more) which has led us to succeed in securing funding from all three Tri-Council agencies – SSHRC, NSERC, and CIHR. Innovation and entrepreneurship happen at the intersections among fields. The academic diversity of TRSM creates these intersections and therefore opportunities.

The proposed doctoral program will capitalize on the above-mentioned strengths, particularly focusing on a range of topics that offer unique insights into digital enterprises, strategic management, entrepreneurship, real estate and retail and consumer services that will contribute to the thriving innovation ecosystem at Ryerson.

Expand community engagement and city building:

A PhD program in TRSM will allow us to better fulfill our responsibility toward expanding community engagement and city building by contributing to the pool of business faculty available to provide management education, and a highly educated professional workforce and industry leaders that are critical for economic growth and city building. As a doctoral program with a research focus informed by management practice, the engagement of industry, government, and not-for-profit organizations will be important.

In its Academic Plan, Ryerson University explicitly states that it will continue to "strengthen graduate education and implement strategies specifically designed to support the continued development, administration and delivery of graduate education, and enable the strategic expansion of master's and PhD programs." The Academic Plan communicates a desire to increase the number of graduate students entering and completing advanced degrees at Ryerson.

With respect to this goal, the plan states that "Graduate students are enriched by their programs. They develop essential research and professional skills, play an integral and vital role in faculty SRC activities and, in turn, receive mentoring, supervision, training and support. As such, stronger linkages between graduate education and research are central to the long-term success and sustainability of a robust SRC culture at Ryerson."[30]

[29] TRSM Accreditation Database, Sedona Systems

[30] https://www.ryerson.ca/provost/academic-plan/

The plan also states that the expansion of master's and PhD programs is needed to "meet the demand for highly qualified personnel in the private, public and not-for-profit sectors." Although doctoral programs will naturally account for only a small portion of the total graduate student body, a PhD program at TRSM is consistent with Ryerson's goals for graduate education.[31]

The TRSM academic plan, translates these university wide goals to the context of the business school. This plan includes a number of goals and tactics relevant to the offering of the PhD program.

TRSM Academic Plan

Strategic Objective 1: Redefining Experiential Learning for the 21st century

The proposed PhD in Management will engage students in experiential learning. TRSM faculty supervisors have a history of collaborative research with graduate students and industry through Mitacs and Ontario Centre for Excellence, for example. Experiential learning would revolve around research opportunities that stay close to our roots and cultural history for developing highly qualified professionals prepared to tackle the complexities of industry and society. Potential partnerships may include the Mitacs Accelerate and/or Elevate programs offering internships to graduate students and postdoctoral fellows from all disciplines to collaborate with industry on research projects. Such programs provide experiential training in research and development through their industry-academic research collaboration. Leadership and business skills training are included in the programs' curriculum.[32] We fully anticipate that the proposed PhD in Management will add value to the learning experiences for TRSM students in current undergraduate and graduate (B. Comm., MBA, MScM, and MHA (CC)) programs, through interaction with high-achieving PhD students as Graduate Assistants in the classroom and Research Assistants in research settings.

Strategic Objective 2: Enhancing Graduate Programs and Research

The groundwork for launching a doctoral program included the revitalization of TRSM's thesis-based Master of Science in Management (MScM) program, and research culture. The revised MScM program admitted its first cohort of 17 students in September 2015, another 25 in 2016, 30 in 2017, and 34 in 2018. With substantive changes to the degree program and amended degree name; impact on enrolment is noteworthy, as this program has seen the largest increase in applicants across all graduate programs at Ryerson.

Since being expanded to all of TRSM in 2015, student intake in the MScM has grown 100%.

Table 1.0: TRSM MScM Student Intake

Entry Year	September 2015	September 2016	September 2017	September 2018
Enrolment	17	25	30	34
Year over year % Increase in Enrolment		47%	20%	13%

Changes made to the MScM enabled a broader range of research areas reflecting all the departments and schools within TRSM to appeal to a larger population of prospective students and involve far more faculty in

[31] Ibid

[32] https://www.mitacs.ca/en/programs/accelerate

the graduate programs and supervision roles. The intent of enhancing our graduate programs, including the proposed PhD in Management is to be responsive to market needs, grow our reach in industry and build greater graduate level brand awareness.[33]

Strategic Objective 3: Cultivating our Community Building Reputation

A PhD program in TRSM will allow us to better fulfill our responsibility toward cultivating relationships with community stakeholders. By contributing to the pool of advanced degree holders, the expertise and business skill set acquired will allow TRSM to apply entrepreneurial principles and social innovation to address the social and economic issues facing of our local communities.

Strategic Objective 4: Improving Our Internal Governance, Communications and Structures to Enable Lasting Innovation

With the formation of the TRSM Faculty Council and Graduate Programs Council (GPC) in 2014, academic governance for graduate programs has been strengthened.

Most importantly, the introduction of the PhD will support the TRSM Academic Plan in several ways:

- Develop a research oriented graduate program appropriate for close collaboration with local and regional industry partners.
- Support a rich TRSM history of contributing to the economic and social development of the local community through partnerships with business organizations.
- Create a cadre of graduates with expertise in generating scholarly research and new knowledge in management and equipped with the means to communicate and disseminate this new knowledge through a potential teaching contract. Course instruction may include, but not limited to, spring/summer courses in TRSM Professional Master's Diploma (PMDip) options and TRSM MBA Foundation courses.
- Contribute to the growing number of PhD programs at Ryerson University.

A management school with vibrant graduate programs and revitalized SRC will serve the mission of Ryerson far better than a primarily undergraduate focused Faculty.

1.b.vi. Program Learning Outcomes and Graduate Degree Level Expectations (GDLEs)

The Council of Ontario Universities has established a framework of Graduate Degree Level Expectations (GDLE)that specify what students should know, and be able to do, after successfully completing graduate degree programs. The GDLEs for doctoral level degrees are represented by the following six categories:

1. Depth and breadth of knowledge
2. Research and scholarship
3. Level of application of knowledge
4. Awareness of limits of knowledge

[33] www.ryerson.ca/content/dam/tedrogersschool/trsm-documents/actionplan-2019.pdf

5. Level of communications skills
6. Professional capacity/autonomy

The proposed PhD in Management will prepare its graduates for careers in research, teaching and industry and is designed to provide all students (regardless of specialization) with strong training in discipline-specific research, methods, and teaching to set them up for success in the market and throughout their careers. The program is also designed with a flexible structure to facilitate the expansion of other business disciplines in the future. The program will offer four specialization options.

Table 1.1 shows the relationship between the Graduate Degree Level Expectations (GDLEs) and Program Learning Outcomes, with a focus on what is expected of students upon completion of the program. The outcomes are focused on the integration of subject matter and development of solid communication skills.

Table 1.1: Program Learning Outcomes and Graduate Degree Level Expectations (GDLEs)

GRADUATE DEGREE LEVEL EXPECTATIONS (GDLEs)	This degree extends the skills associated with the Doctoral degree and is awarded to students who have demonstrated	Program Learning Outcomes
1. Depth and Breadth of Knowledge	A thorough understanding of a substantial body of knowledge that is at the forefront of their academic discipline or area of professional practice	LO1.a Integrate and critique a broad range of literature in management relevant to chosen area of research LO1.b Identify and appraise controversies in the field of research LO1.c Articulate the broader implications of research within and beyond particular contexts of management
2. Research and Scholarship	a. The ability to conceptualize, design, and implement research for the generation of new knowledge, applications, or understanding at the forefront of the discipline, and to adjust the research design or methodology in the light of unforeseen problems; b. The ability to make informed judgments on complex issues in specialist fields, sometimes requiring new methods; and c. The ability to produce original research, or other advanced scholarship, of a quality to satisfy peer review, and to merit publication.	LO2.a Comprehensively and critically review the literature associated with research topic LO2.b Design and conduct original research according to standards and quality required to satisfy peer review LO2.c Evaluate and articulate the strengths and limitations of relevant potential research approaches in relation to chosen area of study
3. Level of Application of Knowledge	a. The capacity to undertake pure and/or applied research at an advanced level; and b. Contribute to the development of academic or professional skills, techniques, tools, practices, ideas, theories, approaches, and/or	LO3.a Contribute to new ideas, theories, skills, techniques, tools, and/or practices LO3.b Synthesize and integrate existing literature, own findings or both into scholarly activities

	materials.	LO3.c Demonstrate teaching and learning strategies applied to specific instances
4. Professional Capacity/Autonomy	a. The qualities and transferable skills necessary for employment requiring the exercise of personal responsibility and largely autonomous initiative in complex situations; b. The intellectual independence to be academically and professionally engaged and current; c. The ethical behaviour consistent with academic integrity and the use of appropriate guidelines and procedures for responsible conduct of research; and d. The ability to evaluate the broader implications of applying knowledge to particular contexts.	LO4.a Engage with academic and professional organizations to situate and evaluate the implications of existing and created knowledge to specific contexts LO4.b Model/facilitate the development of scholarship in novice and developing practitioners and engage as independent professionals demonstrating autonomous initiative and accountability in complex situations. LO4.c Demonstrate ethical behaviour consistent with academic integrity and the responsible conduct of research
5. Level of Communication Skills	The ability to communicate complex and/or ambiguous ideas, issues and conclusions clearly and effectively	LO5.a Communicate complex ideas, issues, arguments and research findings clearly and effectively in both oral and written formats in a manner that is accessible and appropriate to a variety of audiences LO5.b Debate various types of knowledge and application of methods LO5.c Disseminate findings to advance scholarship and knowledge transfer/mobilization
6. Awareness of Limits of Knowledge	An appreciation of the limitations of one's own work and discipline, of the complexity of knowledge, and of the potential contributions of other interpretations, methods, and disciplines.	LO6.a Articulate and propose steps to address limitations of one's own work and discipline, of the complexity of knowledge, and of the potential

		contributions of other interpretations, methods, and disciplines. LO6.b Seek opportunities to collaborate with others, and integrate feedback and new information, to enhance knowledge.

1.c. Curriculum Overview

The PhD in Management would require the successful completion of nine-one-term graduate courses, passing the candidacy examination and a proposal defense, and completing a dissertation based on independent, original scholarship. See Tables 1.2 and 1.3 for structure and timelines.

The nine one-term courses will be comprised of three core courses, three elective courses, and three required research seminar courses. The three PhD level core courses include new Qualitative and Quantitative Research Methods courses and a new Management and Organization Theory course. Of the three elective courses, one must be taken at the PhD level in the students' proposed area of specialization and two elective courses may be taken from the available master's level electives at TRSM or from graduate level electives offered by other Ryerson University departments. PhD in Management candidates at TRSM can take up to two full-course equivalents outside Ryerson University with the approval of their supervisor, PhD Program Director, Associate Dean, YSGS and host University authorities as appropriate.

The curriculum will also include participation in, and presentations by, PhD candidates in doctoral level research seminars. In these seminars, faculty members and students discuss theoretical and applied research within the area, explicitly focusing on the methodologies that are useful to conduct and disseminate research.

The successful completion of a PhD in Management degree is typically a multi-stage process that includes a series of required and elective courses, a candidacy exam, and the research, writing and defense of a dissertation. Variations exist among programs with regards to the number and types of courses required, however, typically the first two years of a PhD in Management program are devoted to course work and candidacy exam, with the remaining years devoted to research and thesis preparation. Having consulted websites of universities offering doctoral programs across Canada, Table 2.4 offers information about the course requirements in PhD in Management programs in Canada.

The proposed PhD in Management is centred on research on complex management problems in an interdisciplinary context. The courses proposed teach the skills to address complex management issues by taking a system-level approach and by drawing upon resources and ideas from multiple functional areas within TRSM that provide a holistic perspective to defining and solving problems. The proposed specializations offer integrative courses not commonly found in other PhD in Management programs.

Via their program of coursework, students are expected to acquire a solid grounding in the core theoretical paradigms relevant to the field of management and their chosen area of specialization necessary for productive scholarship. The minimum time for the completion of the required coursework (presented in Tables 1.2 and 1.3) is one year (for full-time students), however, following admission to the PhD in Management, the Supervisor/Supervisory Committee will determine (based upon students' academic background and interests) if additional coursework is required. Each student will be expected to develop conceptual and analytical skills appropriate for the evaluation of theories and the analysis of quantitative and/or qualitative data pertaining to their area of research. This may require students to complete additional courses in a major area directed towards the dissertation research.

Given initial enrolment projections, it is unlikely that all specializations will run in the first year of the program. The proposed PhD in Management is comprised of a number of academic requirements that include graduate course work and other academic activities. The proposed PhD specialization courses are a discrete, time-delimited unit of instructional/learning activity identified by a course code, in which students enroll.

These courses may take many forms, and their timing may not always coincide with the normal beginning and end of classes in each semester.

Students of the PhD in Management are required to take one PhD level elective in their specialization but when the elective course has fewer than five candidates enrolled, candidates may substitute the PhD level elective in their specialization with a directed reading course. A Directed Reading course may be taken as a substitute when an on-site classroom course is not offered due to low enrolment.

A Directed Readings course is an opportunity for students to work individually with a faculty member and to earn credit for individually designed content. The instructor of a Directed Reading course and the student will have a written agreement in place that specifies the student's responsibilities for the course but does not require a syllabus. When a Directed Reading course is used in lieu of a program requirement, early interaction with the assigned faculty member will be essential in the development of a mutually acceptable course description. At a minimum, such a description will contain an outline of the study topic, specification of the work to be done and the materials to be read, the credit to be given, the type and frequency of faculty-student contact, and a statement of the evaluative criteria to be used by the faculty member.

Only faculty holding a graduate appointment may direct such a course, and they must hold a faculty appointment in TRSM. In general, both the student and instructor should be on campus and the frequency of their meeting will be consistent with other courses.

The proposed specializations provide an opportunity to differentiate our PhD from others. Over the past decade or so, the government has pursued a differentiation strategy in the post-secondary market with the goal of facilitating quality outcomes that are aligned with the unique strengths of institutions across Ontario.

Students will be required to pass a Candidacy Examination that includes written and oral components. The purpose of the Candidacy Examination is to determine whether candidates have the appropriate knowledge and expertise to undertake a dissertation in their selected field or area of study. It will be in the take-home exam format and include a small number of questions that require the student to demonstrate how his/her dissertation study is situated within the body of integrated knowledge and how it contributes to new discoveries.

Upon successful completion of the Candidacy Exam, candidates may proceed to develop their proposals for dissertation research. Candidates must orally defend the dissertation proposal with members of the Supervisory Committee. Once students have passed the proposal defense, they will be required to undertake an original study. This research will culminate in students writing a dissertation and defending it through a final PhD Oral Examination. Students' dissertations contribute new knowledge, theories and practices to the field of management.

The curricular objectives of the program are to provide students with:

- A foundation in management and organization theory and research methods
- Comprehensive knowledge in a specialized area within management
- The ability to use management theory and research methods to understand and address problems faced by businesses, non-profits, and governments
- The skills necessary to undertake original research and make a significant contribution to the body of management knowledge
- The ability to read and critique professional and academic literature

- Professional writing and presentation skills

These objectives are accomplished through coursework, significant faculty-student interaction, and the in-depth analyses of problems in the candidacy exam, and the completion of a dissertation.

Students will have the option of presenting their dissertation as either a single piece of coherent, original work (monograph) or as a compilation thesis, which typically is comprised of a collection of integrated, peer-reviewed papers that are book-ended by chapters drawing the papers together.

Course Descriptions of Proposed New Courses

Advanced Research Methods Course: Qualitative

This course will examine qualitative research methods as they apply to business and management studies. Topics will include: historical roots, philosophical assumptions, theoretical framework, and implications of different qualitative approaches; research design; data collection, analysis, and interpretation strategies; critical evaluation of qualitative studies, and research grant writing for a qualitative study. Students will develop their capacity to conduct qualitative research through hands-on projects. This course covers the key concepts and methods of qualitative research. This includes the collection and analysis of qualitative data, writing and discussing results, and preparing a qualitative grant application. Hands-on activities will be provided to demonstrate the concepts, practice and evaluate the various methodologies, and learn to use the common tools and techniques for analyzing qualitative data.

Advanced Research Methods Course: Quantitative

This course explores various quantitative analytical techniques, which will allow students to design research projects appropriately and conduct the necessary quantitative analysis. During empirical studies, this is paramount importance to understand the benefits and drawbacks of various techniques so that a student can choose appropriate techniques to address the research questions being tested. In this course, the focus will be on gaining an understanding of what the various statistical techniques can do during a research study, what is the most effective technique to be able to test the research questions, how to apply them and interpret the results.

Management and Organization Theory

This course focuses on developing a critical understanding of management and organization theories. The course will encompass a survey 24 selected theories from the list of 40 (See course outline in Appendix B). Each week the professor will select two theories from the list for systematic analysis of their ontological assumptions, knowledge interests and epistemological implications. For each of the two theories, two empirical research papers will be reviewed and critically analyzed to enable the students to understand the special challenges of operationalizing the theories in organizational research. Students will be expected to write critical summaries of the readings and selected research to enable the development of a foundational understanding of the subject matter that can be operationalized in empirical research. For the final project, each student will conduct a systematic literature review of a selected area.

Research Seminars

Research Seminars are Pass/Fail courses that require continued registration throughout a student's PhD program. The purpose is to expose students to current research in the Ted Rogers School of Management

including the paradigmatic approaches and methodologies employed to address management research questions. The exposure will aid in the development of the students' own research ideas and implementation. To pass the course, each student is required to attend seven research presentations in year 1 (years 1 and 2 for part-time students), give one presentation in years 2 and 3 (years 3 and 4 for part-time students), and give one presentation in years 3 and 4 (years 5 and 6 for part-time students).

Research presentations will be facilitated via the TRSM Dean's Research Seminar Series and a TRSM research centre/institute closely aligned with the students' area of specialization.

Specialization Electives – New

Digital Enterprise and Social Media Elective

This course aims to introduce students to the overarching concepts, ranging from technical to managerial, that are critical for the functioning of the digital enterprise, the modern networked organization driven by digital technologies and data. After a high level coverage of these concepts, we will focus on seminal theories that attempt to explain how individuals, organizations, and society interact with information and communication technologies and the dynamics caused by technological progress.

Real Estate Studies Elective

This course presents various research topics in the growing areas of real estate. The primary objective of the course is to provide a solid foundation and to expose students to the research topics in this field. It should prepare students to develop their own research agenda or pursue their own research interests that can be published in top economics and finance journals. As a result of the rapidly-growing field, the reading list is evolving and may be supplemented. Papers selected include both published and working papers and cover long-standing and current research questions.

Retail and Consumer Services Elective

This course explores theories and topics related to retail and consumer behavior research. The course comprises of intensive readings, critical analyses of published research papers, and developmental writing. The course provides a survey of classic papers as well as recent theoretical developments in this topic domain. Topics addressed in this course are designed to complement other PhD seminars, while introducing everyone to the topic domain. Opportunities will be created throughout the course to help students develop a deeper understanding of the field and to apply these ideas to develop their own personal research.

Strategy, Innovation, and Entrepreneurship Elective

This course explores theories and topics related to entrepreneurship and strategy research. The course comprises of intensive readings, critical analyses of published research papers, and developmental writing. The course provides a survey of classic papers as well as recent theoretical developments in this topic domain. Topics addressed in this course are designed to complement other PhD seminars, while introducing everyone to the topic domain. Opportunities will be created throughout the course to help students develop a deeper understanding of the field and to apply these ideas to develop their own personal research. Students will have the opportunity to interact with Ryerson's innovation and entrepreneurship ecosystem.

Directed Reading Course

This course gives students space to study literature that explores the full theoretical and contemporary scope of readings pertaining to a proposed field of specialization. Under the guidance of the professor, the student

will select a topic and investigate the area of specialization. The course will involve an in-depth review of the literature in a particular area guided by a member of the faculty with whom the student will meet regularly to discuss the readings. Students must seek out the approval of a faculty Supervisor prior to enrolling in this course.

TRSM Graduate Level Electives

In addition to one elective course in the specialization area at the PhD level, students will complete two additional elective courses (depending on specialization). Electives may be selected from graduate level courses offered by TRSM and/or from courses offered by other departments at Ryerson University. Students will select electives in consultation with their Supervisor/ Supervisory Committee.

The following is a list of graduate level electives available from the TRSM course bank:

MB8205	Global issues
MT8808	Consulting Skills
MT8327	Data Management and visualization
MT8328	Supply Chain Analytics
MT8312	Business Analytics for Managers
MT8313	Social Media Analytics
MT8220	Advanced Project Management
MT8809	Venture Financing and Planning
MT8810	Product Development, Commercialization
MT8416	Special Topics Media Management
MT8426	Sports Media & Marketing Business Analytics
MB8304	Organizational Change
MB8711	Negotiation and Conflict
MB8502	Retail and Commercial Development
MB8506	Real Estate Finance
MB8507	Special Topics Retail and Commercial Development
MB8402	Brand Management
MT8425	Digital Media in Practice
MT8925	Executive Leadership for CIOs
MT8911	Technical Foundation for Managers
MT8913	Security and Privacy Management Fundamentals
MT8914	Law, Compliance, Audit and Certification, Computer Crime
MT8931	Corporate and Non-Profit Governance
MT8932	Alternative Perspectives on Finance
MT8933	Investing for Impact
MT8934	Financing and Assessing Social Impact
MH 8001	Strategy in the Home and Community Care
MH 8002	Comparative Health-Care Policy
MH 8003	Management in Home and Community Care
MH 8004	Performance in Home and Community Care
MH 8005	Information Technology for Home and Community Care

Candidacy Exam

Candidacy exam usually takes place in years 2 and 3 (years 3 and 4 for part-time students) after students complete all their coursework. It includes two parts: a written exam and an oral exam. The written exam includes essay type questions that examine the candidate's integrated knowledge learned through the required and elective courses and the candidate's preparedness for conducting research in the chosen field of specialization. It will be in the take-home exam format and assesses the student's ability to situate his/her dissertation research and how the dissertation research will contribute to the management field. The oral exam is held after the written exam and the objective is to further evaluate the candidate's ability to carry out his/her dissertation research in the chosen academic field of specialization.

Proposal Defense

The proposal defense is held after the candidacy exam. Its objective is to ensure that the candidate's research plan for investigating a proposed research question is complete and academically meritorious. Students work closely with their supervisory committee in determining the composition of the dissertation proposal.

Dissertation

The Dissertation portion of the program primarily consists of individual research, under the supervision of a qualified faculty member and committee who bring a broad range of expertise to the student's research topic. Dissertations should exhibit substantial evidence of original scholarship of high standard. The dissertation may be in the format of a monograph or three publishable academic journal papers.

Candidates defend their dissertation to an examining committee as per Ryerson University guidelines for examination and assessment.

Program length is four years (full-time); six years (part-time).

1.d. Curriculum Structure

As can be seen in Tables 1.2 and 1.3 both full and part time options have a coursework stage and a research stage followed by the dissertation.

Table 1.2: Program Curriculum Structure and Timeline – Full-time

Coursework Stage	Research Stage	Dissertation Stage
Year 1	**Years 2 & 3**	**Years 3 & 4**
Required courses (3): Advanced Research Methods Course: Qualitative (new) AND Advanced Research Methods Course: Quantitative (new) AND Required Management and Organization Theory (new)	Candidacy Exam Proposal Defense	Dissertation Research: Original Scholarship that contributes to knowledge and practice Single piece of work or a compilation thesis (series of integrated manuscripts)
Research Seminars (P/F) with required attendance	Research Seminars (P/F) with required presentation	Research Seminars (P/F) with required presentation
Required Elective Courses (3) At least one elective course must be taken from the PhD electives course list and in the area of specialization (new) Note: Students may register for a directed reading course under the supervision of a faculty member. Generally students pursue directed readings on a special topic of interest for which there is no timetabled	Dissertation Research	Dissertation Defense/ Final Examination

course in the curriculum.		

Table 1.3: Program Curriculum Structure and Timeline – Part-time

Coursework Stage	Research Stage	Dissertation Stage
Years 1 & 2	Years 3 & 4	Years 5 & 6
Required courses (3): Advanced Research Methods Course: Qualitative (new) AND Advanced Research Methods Course: Quantitative (new) AND Required Management and Organization Theory (new)	Candidacy Exam Proposal Defense	Dissertation Research: Original Scholarship that contributes to knowledge and practice Single piece of work or a compilation thesis (series of integrated manuscripts)
Research Seminars (P/F) with required attendance	Research Seminars (P/F) with required presentation	Research Seminars (P/F) with required presentation
Required Elective Courses (3) At least one elective course must be taken from the PhD electives course list and in the area of specialization (new) Note: Students may register for a directed reading course under the supervision of a faculty member. Generally students pursue directed readings on a special topic of interest for which there is no timetabled course in the curriculum.	Dissertation Research	Dissertation Defense/ Final Examination

1.e. Program's Relationship with Other Ryerson Programs

1.e.i. Overlap and Integration with Other Programs

Synergy with Other Programs

The proposed PhD in Management will add value to the research opportunities for TRSM students in our current undergraduate and graduate (e.g., B. Comm., MScM, MBA, and MHA(CC)) programs. A number of TRSM faculty look to other graduate programs to recruit doctoral students, such as Environmental Applied Science and Management (EnSciMan), Communication and Culture (ComCult), Engineering, and Computer Science, based on their disciplinary backgrounds. The proposed PhD in Management program introduces opportunity to further develop the capacity of management to contribute to those programs and other relevant ones at Ryerson.

Students completing the MScM represent a potential pipeline of candidates for the proposed PhD in Management, and would benefit from interaction with doctoral students on research teams led by mutual supervisors. Research Seminars would be a point of integration between the master's and doctoral programs.

Integration/Similarity with other Programs

There is no similar doctoral level degree program at Ryerson University. TRSM offers a Master of Science in Management (MScM) where students develop their program of study and thesis research working with a faculty supervisor from TRSM.

One program with Management connections to the proposed PhD in Management is the interdisciplinary EnSciMan PhD program offered by Ryerson. The EnSciMan program explores the full range of environmental disciplines including science, engineering, business, architecture, planning, public health and the social sciences. Students of the EnSciMan program do not take any courses from TRSM, however students are required to conduct advanced research on a topic related to one (or more) of the following specialty areas: environmental applied science, policy and management. Over the years, students of the EnSciMan program have been supervised by several faculty members from TRSM.

The areas of specialization in the proposed program and EnSciMan differ in that the curriculum in the EnSciMan program requires individuals to study in two fields:

1. Environmental Science and Policy, and
2. Environmental Management and Decision Making

With very different specializations and target students, the proposed PhD in Management does not require environmental science knowledge competence. The focal point is management not environmental science leading to different academic and professional career paths.

The EnSciMan program was developed to clearly link the environmental sciences and the management and decision-making disciplines in order to provide students the opportunity to integrate the two areas of study in the classroom and their research. The emphasis is on applied research for resolving problem in environmental protection, conservation and sustainable development.[34]

[34] https://www.ryerson.ca/graduate/programs/ensciman/

There are no planned or current programs at Ryerson University that would overlap with the proposed TRSM PhD in Management program.

1.f. Provost's Authorization to Proceed

The Provost provided a letter authorizing TRSM to proceed in the developing of a proposal for the proposed PhD in Management on June 19, 2018.

In this letter, the Provost shared a number of key issues needing to be addressed by way of this proposal and include:

- reminder of the program's obligation to develop clearly defined learning objectives
- provide further justification for the proposed specializations and consider whether these specializations are the most appropriate way to structure the program
- clarifying courses associated with the proposed specializations, considering the addition of more quantitative courses (particularly statistics), ensuring that students receive sufficient grounding in philosophical foundations, and considering the extent to which management theory must be addressed
- clarify why the degree is best positioned as a PhD, rather than a DBA
- further explain the potential career pathways for the program's graduates
- clarify and better justify the admission requirements
- provide further detail on the potential funding sources and levels of anticipated funding for students
- consider the potential contributions to the program of Ryerson faculty members from outside of TRSM
- ensure the proposal clarifies the other issues raised during the public posting of the LOI

TRSM is delighted that many Ryerson University colleagues have demonstrated their support for the proposed PhD in Management program. Several respondents to the initial Letter of Intent indicated very strong backing for moving forward with the program.

Additionally, several colleagues shared a number of opportunities to advance the proposal for the PhD in Management. All comments were carefully considered and we truly appreciate all the constructive comments. We have adopted many of the suggestions in this revised proposal. With a large number of comments received our point-to-point responses can be found in Appendix C.

The full authorization letter and a summary of responses to the issues raised can be found in Appendix C.

2. PROGRAM DETAILS

2.a. Alignment with Institution's Plans

2.a.i. Consistency with Academic Plans

The PhD in Management program was proposed in TRSM's Academic Plan 2014 – 2019, and fits with Ryerson's goals to develop new programs and initiatives that build on academic strengths, respond to societal needs and bolster the University's research intensity.

In a world characterized by increasingly disruptive and rapidly changing forces, organizations need the capacity to analyze, strategize, and act on the opportunities and challenges encountered. At the heart of this capacity are people with both the intellectual and practical knowledge to understand the environment in which organizations operate and to develop and deliver solutions that address the pressures faced. It is well recognized that there is a shortage of highly skilled employees capable of doing deep analysis of complex business problems. The program proposed is designed to develop such people.

Ryerson's mission statement shows a deep commitment to teaching, research, community outreach and engagement, and promotes the economic, social, cultural progress for the nation and the world. This mission is achieved by producing graduates competitive in the global economy, supporting a continuous search for new knowledge and solutions, and maintaining a rigorous focus on academic excellence, particularly in the areas outlined in the Strategic Mandate Agreement.[35]

TRSM and the proposed PhD in Management program support a number of the signature areas of distinction outlined in the SMA including Digital Economy; Innovation and Entrepreneurship; and Management and Competitiveness. A PhD in Management will help Ryerson and TRSM accomplish it goals by offering a unique suite of program specializations that support the programs of identified strength and expansion in the SMA.

Since the launch of graduate degrees in 2007, TRSM has had a renewed focus on research to complement its success in imparting undergraduate business education. The renewed focus on research got a boost when TRSM was accredited by AACSB. To maintain accreditation, TRSM associated faculty members are required to generate scholarship in a variety of formats, including top-tier journal publications. Unlike other disciplines, business schools are subject to various rankings, which influence their reputation and the ability to attract faculty, students, and philanthropic interest.

Research excellence and productivity are key to the success of TRSM. The faculty's SRC plan identifies improving research productivity and excellence as a desired goal. Within the framework of the TRSM SRC and Academic Plan, the specializations will support the primary initiatives of TRSM as a recognized leader in societally relevant, rigorous research with local, national, and global impact. There is no doubt for example that the fields of retail and real estate are prevalent in the local, the national, and the global realm; the specializations in the PhD program are properly positioned to drive TRSM's research priorities.

The specializations will bring talented scholars to TRSM who, in collaboration with their faculty supervisors, will generate new scholarship to find solutions to the increasingly complex challenges facing markets in local and global contexts.

A focus on Innovation and Entrepreneurship is one of Ryerson's core claims to differentiation with significant mention in both the University's and TRSM's Academic Plans and in our SMA submissions.

The Academic Plan states:

- Ryerson recognizes that creativity and innovation should not be contained. Its diverse learning community collaborates across disciplines and with external partners, taking smart, calculated risks to turn promising ideas into tangible solutions, products, processes or services that make a positive and meaningful impact upon society.
- For Ryerson, innovation means encouraging its academic community to challenge the status quo with new solutions and to apply new ways of thinking that transform the world. As one of the world's most

[35] https://www.ryerson.ca/provost/academic-plan/

diverse and urban universities, it also recognizes that innovation depends on diversity of experience and thought.

- Through its programs and zone learning -- a pioneering approach to experiential learning that is transforming entrepreneurial education in Canada -- Ryerson is shaping the next generation of change makers and advocacy leaders, innovators and entrepreneurs

The TRSM Mission as stated in its Academic Plan includes the phrase "We shape socially conscious leaders with an entrepreneurial orientation and we promote impactful research that has local, national and global relevance". In its current Strategic Mandate Agreement with the Province, Ryerson states that "The Digital Economy, Innovation, and Entrepreneurship" is an area of strength and that "Innovation and Entrepreneurship" is a targeted area for program growth.[36]

A PhD with its proposed specializations will support these high-level objectives and goals both at the University and at the Faculty level.

As a maturing research institution, doctoral education is at the heart of Ryerson's mission and its ambition to be a leader among comprehensive universities across Canada. The proposed program represents a commitment to, and an investment in, research excellence thereby generating positive reputational capital. Such a commitment and a strong standing in the academic community are crucial in the effort to attract and retain high-achieving faculty, which is another stated initiative toward accomplishing the goals in TRSM's Academic Plan. It is often the case that upon entering the job market, graduates of high-ranking business doctoral programs and experienced business faculty at high-ranking institutions will dismiss business schools that do not offer a PhD program as potential employers, labeling them "teaching schools" that do not value research. Offering a doctoral program in the TRSM will broaden the pool of high-achieving faculty available to TRSM and enhance our ability to attract and retain such faculty. While TRSM faculty are already highly productive in terms of scholarship, the investment in new faculty (i.e., collaborators), research resources (e.g., databases), and graduate assistants associated with the PhD program will help to increase the quality and quantity of research output from the Faculty further enhancing our standing in the academic community.

The PhD in Management program will increase the research intensity of TRSM, and, in turn, that of Ryerson University. Having doctoral level students doing dissertation research will give faculty a cadre of talented students who would work collaboratively with faculty to develop research proposals and conduct more intensive scholarly research beyond the level normally expected in MScM.

Many faculty members in the School, even if they have funding, cannot find suitable research students who can dedicate time to pursuing a funded research program. Students in the MScM program do not have sufficient research training and capacity to carry out and support faculty research, nor do they stay in the program long enough to participate in faculty research projects. PhD students will give faculty the opportunity to draw on the creativity, research expertise, and enthusiasm of these students to infuse new ideas and energy into the research enterprise.

PhD students will be able to work closely with faculty supervisors and take advantage of funding opportunities internally and externally to develop their own research programs. The research seminars will help to build knowledge of complex managerial issues and provide insight into how to frame and tackle these issues from a research perspective. Seminars in research methodology will provide the knowledge needed to craft the appropriate research design and carry out the data gathering and analysis. Students will make presentations

[36] https://www.ryerson.ca/tedrogersschool/about/academic-plan/

in class and other venues. This will help to develop their ability to communicate research ideas and findings in clear and understandable ways.

At a broader level, we believe that great universities have great business schools. Virtually every discipline in a university has some business application. In addition to contributing to knowledge generation through scholarship activities, business schools provide value to a university in multiple ways through their connections with the business community (e.g., fundraising, co-op/placement of graduates, etc.). Accordingly, Ryerson benefits significantly in terms of the advancement of knowledge, collaboration with other Faculties on campus, and external connections from having a highly-respected business school.

As a final point, we believe that establishing a PhD program will contribute to the TRSM mission, particularly the provision of "recognized research-based education" to our students. First, we believe that good researchers make good teachers. Therefore, we expect that the program will add value to the classroom experience for students in our current undergraduate and graduate programs, partially due to current faculty bringing their research into the classroom and partially from the addition of high-achieving new faculty who will do the same. Second, the positive reputational capital generated by the PhD program will enhance the international recognition part of the mission by raising the standing of TRSM in the academic community. See Section 1.b.v: Program Alignment with Academic Plan(s).

2.a.ii. Graduate Degree Level Expectations and Learning Outcomes

As shown in Table 1.1, in section 1.b.vi, the program requirements have been designed to be consistent with GDLEs. Each of the dimensions is addressed.

Program requirements for the proposed PhD in Management emphasize student engagement in research throughout their time in the degree program, faculty mentoring, faculty-student collaboration in research, and a strong multidisciplinary perspective that provides students with the theoretical and methodological depth needed to pursue dissertation research.

Students will acquire the critical thinking and research skills to become independent scholars, at a level comparable to those who obtain faculty positions at universities. Students will study advanced required coursework in the theoretical literatures that underpin management practices, including advanced coursework in research methods in quantitative methods to qualitative methods.

The PhD coursework is designed to produce graduates with rigorous research and analytical skills, who are exceptionally well-equipped to go onto careers in the academy, or employment in industry and the public service. The PhD program provides a period of sustained in-depth study of a specific topic, an environment that encourages the student's originality and creativity in their research and skills to enable the student to critically examine the background literature relevant to their specific research area. The program will offer a series of research seminars that will create an environment in which students can develop skills in written work, oral presentation and publishing the results of their research in high-profile scientific journals, through constructive feedback of written work and oral presentations

Students will master the knowledge of one specialization at the breadth and depth that is characteristic of being able to make scholarly contributions to the discipline. The specialization will be chosen by the student under the guidance of and in consultation with their supervisor. Students will master a specific set of methods appropriate to their dissertation, with the depth needed to produce methodologically rigorous research.

Some candidates may be expected to exceed the minimum two courses of advanced methods. Specific courses appropriate for the methods requirement will be selected in consultation with the Supervisor.

The ability of candidates to communicate their ideas and data concisely and cohesively via oral presentations is a valuable and important skill. In order to facilitate the development of this skill, students in the program are required to attend three seminars and present at two of the seminars as part of their degree requirements. All students must attend relevant seminars, present in at least two seminars, and comply with any other prescribed conditions. The purpose of the research seminars is to stimulate critical, constructive and generous discussion of PhD students' research and writing in progress, to continue cultivating a lively and supportive intellectual community. Students will share aspects of their research as it develops, which will encourage them to synthesize the evidence they have gathered thus far, thereby helping them to marshal their materials into a manageable form as their research proceeds. Further, students will receive feedback from others interested in their area of study, assisting them in considering aspects they might not otherwise have addressed.

The objective of the Candidacy Exam is to determine that the student is able to undertake the work of the dissertation, by integrating the theoretical concepts and the methodological approaches in their field. It provides evidence that the student is able to critically evaluate current literature in the discipline, synthesize ideas within the field, and demonstrate a comprehensive understanding of techniques critical to conducting research in the field. Student must be able to communicate clearly and effectively to audiences.

The dissertation presents a major piece of guided independent research involving a literature review and an appropriate form of critical analysis of sources of primary and/or secondary data. The dissertation must show evidence of critical analysis and synthesis of existing body of literature and appropriate use of advanced research techniques to create new knowledge and contribute to discoveries. On satisfying the requirements of the dissertation, students will have the knowledge and skills to independently plan, execute, and disseminate a research project relevant to management disciplines.

Assurance of Learning
TRSM places a significant emphasis on learning outcomes in our graduate programs. Both the Assurances of Learning (AoL) as part of the AACSB (Association to Advance Collegiate Schools of Business) accreditation review, and the GDLEs are a baseline to assess whether graduate programs remain current with respect to expectations and societal need, and provide students with the required skills for success after graduation. Both the specific metrics associated with the GDLEs and AoL were influenced by TRSM's academic plan. Existing quality assurance practices are well developed within TRSM and the appropriate assessment of learning outcomes will be applied to this new degree.

Program Learning Outcomes
LO1.a Integrate and critique a broad range of literature in management relevant to chosen area of research
LO1.b Identify and appraise controversies in the field of research
LO1.c Articulate the broader implications of research within and beyond particular contexts of management

LO2.a Comprehensively and critically review the literature associated with research topic
LO2.b Design and conduct original research according to standards and quality required to satisfy peer review
LO2.c Evaluate and articulate the strengths and limitations of relevant potential research approaches in relation to chosen area of study

LO3.a Contribute to new ideas, theories, skills, techniques, tools, and/or practices
LO3.b Synthesize and integrate existing literature, own findings or both into scholarly activities

LO3.c Demonstrate teaching and learning strategies applied to specific instances

LO4.a Engage with academic and professional organizations to situate and evaluate the implications of existing and created knowledge to specific contexts
LO4.b Model/facilitate the development of scholarship in novice and developing practitioners and engage as independent professionals demonstrating autonomous initiative and accountability in complex situations.
LO4.c Demonstrate ethical behaviour consistent with academic integrity and the responsible conduct of research

LO5.a Communicate complex ideas, issues, arguments and research findings clearly and effectively in both oral and written formats in a manner that is accessible and appropriate to a variety of audiences
LO5.b Debate various types of knowledge and application of methods
LO5.c Disseminate findings to advance scholarship and knowledge transfer/mobilization

LO6.a Articulate and propose steps to address limitations of one's own work and discipline, of the complexity of knowledge, and of the potential contributions of other interpretations, methods, and disciplines.
LO6.b Seek opportunities to collaborate with others, and integrate feedback and new information, to enhance knowledge.

With respect to GDLEs, gaining a breadth and depth of knowledge is mapped to core courses as presented in Table 2.0. Overall, both the learning objectives and the courses show a sound relationship to the GDLEs.

Since the inception of the TRSM Graduate Program Council (GPC), curriculum is overseen by the Curriculum Committee. Representatives of TRSM and its GPC participate on the YSGS Council, which oversees new program proposals and major curriculum changes to ensure quality programs and course offerings at the doctoral level.

Table 2.0: Graduate Degree Level Expectations and Courses

GDLEs	Depth and Breadth of Knowledge	Research and Scholarship	Level of Application of Knowledge	Professional Capacity/Autonomy	Level of Communication Skills	Awareness of Limits of Knowledge
Core Courses						
Advanced Research Methods – Qualitative	√	√	√	√	√	√
Advanced Research Methods – Quantitative	√	√	√	√	√	√
Management and Organization Theory	√	√	√	√	√	√
Research Seminars	√	√	√	√	√	√
Candidacy Exam	√	√	√	√	√	√
Dissertation	√	√	√	√	√	√
Specialization Courses						
Digital Enterprise & Social Media	√	√	√	√	√	√
Real Estate	√	√	√	√	√	√
Retail and Consumer Services	√	√	√	√	√	√
Strategy, Innovation & Entrepreneurship	√	√	√	√	√	√

Directed Reading Course Note: Students may register for a directed reading course under the supervision of a faculty member. Generally students pursue directed readings on a special topic of interest for which there is no timetabled course in the curriculum.	√	√	√	√	√	√

2.a.iii. Degree Nomenclature

The proposed degree is a PhD in Management. The program is named according to the broad discipline of Management to which the program belongs. The program nomenclature will be easily recognizable by prospective students, employers and other stakeholders. The PhD credential demonstrates mastery of the field and ability to conduct independent research.

2.b. Admissions

2.b.i. Admission Requirements

The admission committee will consider all aspects of the applicant's academic and professional backgrounds, with the goal of selecting students who are most likely to succeed in their studies/research and make a significant contribution to TRSM's research program. The review process will also suggest possible preparatory and other requisite courses that the student may need to take to satisfy all demands of the program. Admission into the PhD in Management program will be judged primarily on the applicant's potential to undertake research successfully and his/her prospects for completion of the program. Applicants will submit a research proposal statement on applying to the program.

Faculty strengths and interests will be highlighted early in the program for each incoming cohort. In addition, incoming students will be asked to identify proposed areas for research and a potential supervisor as a part of the admissions process. Attempts will be made to match these interests with faculty interests as early as possible.

Ryerson University Policy 164 stipulates that in some graduate programs, a student may transfer from a Master's program to a Doctoral program without completing the Master's degree.[37]

Students enrolled full-time in the MScM program at TRSM, may be permitted to transfer into the PhD program, without completing the master's thesis, provided they meet the following conditions:

- completion of all course requirements for the Master's degree with a minimum 3.67 GPA
- have demonstrated exceptional research potential
- make a formal application for admission to the PhD program no later than the third term of initial registration in the MScM program
- GPD and supervisor or Supervisory Committee's permission

Note: A student who transfers from a Master's program to a Doctoral program may not transfer back to the Master's level nor receive a Master's degree in that program.

Ryerson University has established the following general PhD admission requirements:

The minimum grade requirement for admission consideration to a master's program is a 3.0/4.33 (B or equivalent) in the last two years of study within a four-year undergraduate (or equivalent) bachelor's degree. For doctoral studies, students must have achieved a minimum of 3.33/4.33 (B+ or equivalent) in their master's program.[38]

[37] https://www.ryerson.ca/content/dam/senate/policies/pol164.pdf

[38] https://www.ryerson.ca/graduate/future-students/apply/requirements/

Additionally, to gain admission to graduate programs in Management/Business Administration, applicants are expected to take a Graduate Management Admission Test (GMAT) and/or a Graduate Record Examinations (GRE). There is no established minimum score for the GMAT and/or GRE however; test results will be an important part of applicants' profile.

The GMAT (Graduate Management Admission Test) is a 3½-hour standardized exam designed to predict how test takers will perform academically in Management/Business Administration programs. About two-thirds of the 1,900 plus graduate business schools around the world require GMAT scores for admission, with an increasing number of schools accepting the GRE General Test scores as an alternative to GMAT scores. Upon reviewing the admission requirements of 22 PhD in Management programs across Canada, 18 institutions require a GMAT/GRE. The GMAT seeks to measure four broad skill areas: analytical writing, quantitative reasoning, verbal reasoning, and integrated reasoning (which embraces analytical, quantitative, and verbal reasoning).

In repeated research studies, GMAT scores have been found to be an extremely accurate predictor of academic success in graduate management education programs. Unlike grade point averages, which vary according to the grading standards of each school, GMAT scores are based on the same standard for all test takers.

Undertaking a PhD is clearly about producing excellent research - but it is also about developing a candidate's professional capabilities. TRSM wants to recruit quality PhD students. This is essential to the success of the student, and to give them the best possible chance of completing on time and with good results. The admission criteria established is intended to gauge an applicant's chance of success. The current selection criteria are intended to identify students who have a strong background in the discipline and demonstrated research readiness or research capability.

2.b.ii. Calendar Admission Requirements

Full-time and Part-time applicants seeking admission to the PhD in Management program must have:

- Master's degree from a recognized university*
- GPA = 3.33/4.33 (B+ or equivalent) in a master's program
- Demonstrated graduate level research capability and/or potential (e.g., Thesis, MRP, Peer Review Journal article)
- Knowledge of research methods prior to application as evidenced in their transcripts. (If this knowledge is not evident, applicants must successfully complete a research methods coursework equivalent to MT8103[39] and MT8104)[40]
- Two reference letters at least one of which is from a former professor familiar with the applicant's research abilities and/or potential
- A statement of intent (research interest)
- Faculty Supervisor Review: Applications that meet the admission criteria will be reviewed by potential

[39] Applied Research Methods I - Students are introduced to quantitative and qualitative research techniques, with particular emphasis on their application to the field of management.

[40] This course is a continuation of MT8103. In this course, students will refine their research question, develop expertise in the specific methodology to be used for their thesis research, and will develop a research proposal.

supervisors identified in the applicant's statement of interest
- Interview: An online or in-person interview may be required
- Appropriate/approved Graduate Management Admission Test (GMAT) and/or a valid Graduate Record Examinations (GRE) score.
    - Under exceptional circumstances or where an applicant possesses an MScM from TRSM, requests for GMAT/GRE waivers for admission may be considered at the discretion of the Program Director and only if the applicant can provide sufficient evidence of academic ability
- Identification of a confirmed supervisor

Applicants with a Master's degree should have acquired the knowledge and associated skills, in particular, with research methodology and processes. Requiring applicants to have a Master's degree will serve as a foundation in which all PhD candidates will have at least minimum knowledge and graduate experience, upon which to build work towards the completion of their doctoral degree.

*If the applicant does not hold a research-based master's degree and/or the degree is in an unrelated field, additional research and/or foundational management coursework may be required. The practice is that TRSM will extend a conditional offer of admission to the PhD in Management applicant who does not quite meet the minimum course requirements set in the admission requirements. Upon successful completion of the prescribed terms of study, the student will proceed directly into the program. Depending on the courses required by the student, the additional time is expected to not exceed a one a period.

Students admitted with conditional admission course requirements are not allowed to make academic progress toward their PhD in Management degree before they successfully complete the course work outlined by the Evaluation Committee.

English Proficiency: If applicants have not completed two or more years, full-time, at a Canadian university or a university at which English is the primary language of instruction, or have not completed a graduate degree at a university where English was the primary language of instruction, they will be required to provide certification of English language proficiency through one of the accepted examinations listed below. Scores are valid for two years from the test date.

Minimum English Proficiency Requirements for current TRSM Graduate Degree Programs (MBA, MBA-MTI, MScM): TOEFL (IBT) 100; IELTS ACADEMIC 7.5; MELAB 90; PTE 68.

2.b.iii. Admission Requirements and Student Achievement of Learning Outcomes

When considering program specific admission requirements, knowledge, skills, and competencies consideration was given to how the presence of the indicated attributes or achievements will be fairly assessed toward successful program completion.

Meeting the minimum requirements of the posted admission criteria to the PhD does not guarantee admission. Applicants interested in this program may be required to meet individually with an admissions committee and program faculty in person or via teleconference technology to ascertain if their goals can be met by the program. Prospective students will demonstrate substantial comprehension of key principles related to required courses, and will be able to demonstrate the ability to synthesize, integrate, and analyze research literature. Communication skills will also be assessed at the time of application.

The learning outcomes associated with this program require an ability for students to demonstrate at the time of admission an ability to review the literature associated with research, conduct research according to standards and quality and communicate ideas, issues, arguments and research findings clearly and effectively in both oral and written formats in a manner that is accessible and appropriate to a variety of audiences.

2.b.iv. Alternative Requirements (if applicable)

Under exceptional circumstances, TRSM will allow admission directly into the proposed PhD program on the basis of an appropriate bachelor's degree from a recognized university. Applicants are expected to be of exceptional promise and demonstrate superior academic performance.

Where an applicant is permitted direct entry from a bachelor's degree to the PhD program, the academic requirements for admission will be as follows:

- An appropriate bachelor's degree, or its equivalent from a recognized university, with at least an A average in courses in the relevant discipline
- Demonstration that the applicant is capable of independent research at an advanced level in the subject matter of the relevant program
- At least two strong supporting letters of recommendation attesting to the applicant's research potential
- Other qualifications as may be specified by the Admission Committee

A candidate accepted on the basis of a bachelor's degree will be admitted to a 5-year PhD program with a 7-year time limit for completion of all requirements for the degree. We expect that this type of student would be admitted on an exceptional basis.

When TRSM allows direct entry from a bachelor's degree to the PhD in Management program, the Supervisory Committee will specify the program requirements for such students, which will include a substantial portion of the requirements for TRSM's MScM degree, together with the program requirements for the PhD program.

The Supervisor/Supervisory Committee will closely monitor the progress of direct entry students during the first year of the PhD program. In particular, a minimum number of courses to be completed during the first year of the program, together with an acceptable minimum grade or average for those courses, will be specified.

2.c. Structure and Graduate Degree Level Expectations

The curriculum and its associated outcomes are in line with PhD degree level expectations of the Ontario Universities Council on Quality Assurance. At the program and course level, learning outcomes help define the destination for student learning, and in turn, allow students to be aware of what is expected of them. The learning outcomes encompass a broad base of competencies and students are expected to demonstrate these competencies throughout their study in this program.

The program curriculum is designed to advance students' knowledge and professional skills in fundamental and applied areas of Management beyond the graduate level and also to provide them with opportunities for professional development through engaging in complementary modes of delivery (research seminars) that enhance enabling competencies required by the GDLEs. The program is research-focused, but will take advantage of course-based activities to reinforce technical and professional development, such as reports,

oral presentations, examinations and many opportunities for face-to-face communications to achieve desired learning outcomes.

Since the inception of the TRSM Graduate Program Council (GPC), curriculum is overseen by the curriculum committee. Representatives of TRSM and its GPC participate on the YSGS Council, which oversees new program proposals and major curriculum changes to ensure quality programs and course offerings at the graduate level.

The mapping of the GDLEs to learning outcomes in Table 2.1 confirms that the structure of the curriculum is sufficient to meet the GDLEs at the PhD level. The course summaries provided below are excerpts from the course outlines (Appendix B) prepared by assigned faculty instructors.

Learning Outcomes and Curriculum Mapping was reviewed in consultation with Carolyn Hoessler, Curriculum Development Consultant on January 24, 2019.

Table 2.1: PhD in Management – Curriculum Map

Learning Outcomes	LO1a		LO1b		LO1c		LO2a		LO2b		LO2c		LO3a		LO3b		LO3c		LO4a		LO4b		LO4c		LO5a		LO5b		LO5c		LO6a		LO6b	
COURSES	F	P	F	P	F	P	F	P	F	P	F	P	F	P	F	P	F	P	F	P	F	P	F	P	F	P	F	P	F	P	F	P	F	P
Research Methods - Qualitative	F		F								F		F		F								F		F		F				F		F	
Research Methods - Quantitative	F		F		F		P		P		F		F		P		F						P		P		P				P			
Management and Organization Theory	F		F		F		F				F		F		F								F		F		F				F		F	
Research Seminar Course I	F		F		F		F				F		F		F				F				F		F		F				F		F	
Research Seminar Course II	F		F		F		F		F		F		F		F				F		F		F		F		F		F		F		F	
Research Seminar Course III	F		F		F		F		F		F		F		F				F		F		F		F		F		F		F		F	
Elective - Digital Enterprise and Social Media	P		F		P		P		F		F		F												F		F		F		F			
Elective - Real Estate Studies	P		F		F		P		F		F		P		P		F		F		F		P		F		P		F		P		F	
Elective - Retail and Consumer Services	P		F		F		P		F		P		F		F		F		F		P		P		P		P		F		P		F	
Elective – Strategy, Innovation, Entrepreneurship	P		F		F		P		F		F		F		P		F		F		F		P		P		F		F		P		F	
Develop a Proposal	P		P		P		P		P		P		P		P				F		F		P		P		P		P		P		P	

Candidacy Exam	P	P	P	P	P	P	P	P				P	P	P	P	P	
Dissertation	P	P	P	P	P	P	P	P		P	P	P	P	P	P	P	P
Dissertation Defense	P	P	P	P	P	P	P	P			P	P	P	P	P	P	

Note: F = Foundational Knowledge, P = Proficient

2.d. Program Content and Curriculum

2.d.i. Curriculum and Current State of the Discipline

TRSM and its faculty members participate in the development and evaluation of innovations in teaching and learning. At a minimum, there are formal processes in place to evaluate innovations and to develop best practices across TRSM. There is also extensive sharing across the University, facilitated by the Learning and Teaching Office.

The PhD in Management at TRSM begins with a curriculum of three PhD level core courses, three elective courses (two elective graduate level courses must be in the area of focus with at least one elective in the area of focus taken at the PhD level), and three research seminar courses. The academic coursework is designed to develop the knowledge base necessary for effective research and scholarship development. Participating faculty can decide to attribute the final grade for their courses based on exams, on project assessments, as well as on seminar participation.

All PhD students are required to attend three research seminars. The seminar series will provide students with a background in a variety of theoretical and methodological frameworks that are relevant to the practice of management research. Topics presented will reflect students' research backgrounds and specialization. The seminar will emphasize the connections between theory and method, and will prepare students to develop methodological and theoretical frameworks for their own doctoral research. Seminar goals are to prepare students to become reflexive members of a scholarly community through focused, intellectual discussion and inquiry, as well as through the development of specific research knowledge and skills.

Each PhD candidate selects a dissertation topic as an original contribution to knowledge in his/her specialization. At the end of the first year and during their second year, students write the first draft of a dissertation proposal. The proposal should contain original theoretical and/or empirical work developed by a student under the guidance of a Supervisor. Following the candidacy exam, students will defend a proposition of their project, which includes the motivation, a literature review, a discussion of the methodology, and expected results. The proposal has to be finalized and defended.

The candidate must present a dissertation showing the planning, conduct, and results of original research and scholarly creativity. The purpose of the dissertation is to encourage and ensure the development of broad intellectual capabilities as well as to demonstrate an intensive focus on a problem or research area. The dissertation should be of publishable quality in management journals.

2.d.ii. Unique or Innovative Features

TRSM'S proposed PhD in Management program differentiates itself from other more traditional business PhD programs in two ways; firstly, based on TRSM faculty relationships between the academic and industrial sectors, the proposed program will be rooted in carrying out rigorous research that will contribute to solutions to management issues shared across business sectors, as well as accelerating solutions to themes in the proposed specializations. The program aims to stimulate research at TRSM and to bolster industrial competitiveness. Secondly the proposed program will offer specializations that are uniquely tailored to investigate the current, emerging and evolving realities, challenges and trends of today's business world.

The proposed program's specializations are:

- Digital Enterprise and Social Media

- Real Estate Studies
- Retail and Consumer Services
- Strategy, Innovation and Entrepreneurship

Additionally, TRSM is comprised of non-traditional business school programs, with research active faculty in Tourism and Hospitality Management, Law and Business, and Health Services Management who could attract PhD in Management students.

TRSM PhD in Management program is differentiated through our industry-connected faculty members, relationships with local and global businesses, and TRSM's location in the economic hub of Canada to give students more opportunities for engagement with stakeholders outside academia, access to experiential learning and programming to develop career-related skills. We want student research to be relevant and impactful and informed by the pressing issues in society. A natural extension of this mission is the provision of career development and employment opportunities.

The positive link between TRSM faculty research and industry innovation has been widely recognized among academics and practitioners. A remarkable volume of previous research emphasizes the importance of the transfer of academic knowledge into the industrial domain. There are numerous examples of faculty working with industry partners to advance new knowledge through research - below are just a few of examples:

- Dr. Wendy Cukier's SSHRC Partnership Engage grant explores the advancement of diverse leadership. Partnering with the Canadian Women's Foundation and Ryerson's Diversity Institute, Dr. Cukier's research seeks to analyze cross-sector leadership in the GTA and Montreal areas. It will examine trends over time, dig more deeply into factors that distinguish organizations – those that lead and those that lag, and consider the implication of within-group diversity and intersectionality. This partnership will advance knowledge of diversity data and develop innovative strategies and evidence-based initiatives promoting inclusive leadership across Canada.
- With funding from the NSERC Engage program, Dr. Aziz Guergachi aims to develop a decision support system to formulate inventory policy for products in an industry partner's (Sowingo) inventory management platform. The system requires the adoption of machine learning methods to estimate the demand for the supplies based on their usage patterns. Dr. Guergachi's research will also develop an algorithm to retrieve data from past purchases and the marketplace to guide the vendor selection decision with the goal of reducing the purchasing cost. The algorithm incorporates machine learning techniques to find relevant offers and promotions from the unstructured textual marketplace data.
- Dr. Ken Grant is engaged in a Multi-Year Study of the Early Entrepreneurship Ecosystem in Canada with the support of a Mitacs Accelerate grant. In collaboration with the National Angel Capital Organization (the only national industry association for Angel investors in Canada), NACO represents over 40 networks comprised of over 3000 Angel investors across Canada. For the last five years, NACO has conducted an annual survey of angel investment activities in Canada. This year NACO is adding a second research project with the broader objective of gathering data on the networks between entrepreneurs, angels, venture capitalists, and incubator/accelerator centers. The intent is to gain a deeper understanding of these relationships, to determine areas of strengths and opportunities for improvement that will help inform government policy and the actual behaviour of the various members of the ecosystem.
- NSERC Engage Grant recipient, Dr. Mehdi Kargar's research seeks to build a new search system for industry partner, Warranty Life. The search system will increase the revenue of Warranty Life and will

be directly beneficial to Canada as more revenue for Warranty Life means more investment from the company in Canada and hiring more Canadian talent to expand existing offers and products with respect to the developed technology.

- Dr. Deborah Fels' research seeks to enhance existing VoiceWriter software by streamlining and updating it, incorporating CEA708 digital captioning functionality and animated captions options, and adding speaker-dependent shadow captioning functionality for real-time and post production captioning. This project will endeavour to not only modernize the captioning functionality, but additionally to extend it by incorporating cutting edge captioning technology. This will result in improved accessibility to broadcast content for persons with disabilities (Deaf and HoH community), improved usability of the product/outcome and allow the broadcasting industry to address some of the captioning quality issues that have plagued the industry and standards setting bodies. Dr. Fels' research is supported with funding provided by the Broadcast Accessibility Fund.

Graduates of the proposed PhD in Management will be well prepared to contribute to existing Management theories and/or the development of a new theory, in a way that could substantially contribute to industry's needs and help to bridge the industry–academia research gap. The research conducted by students of this program is expected to produce tangible outcomes (e.g., grant income, patents, or peer-review publications) and have significant impact.

By conducting leading-edge research at the intersection between academia and industry, students will gain a solid understanding of both realms and their interconnectedness. Students will serve as a translator between the academic and business communities, while preparing themselves for a career, whether in research or in industry. Students will acquire a broad range of skills that enable them to develop a rewarding career, including the ability to translate research knowledge into a product, service or another end-use application and strengthen their professional skills.

With only one other school offering a part-time program for a PhD in Management in Canada, there is also an opportunity for TRSM to capitalize on this distinguishing feature and attract working professionals. It can be argued that a candidate pursuing the part-time study option may not afford the same level of engagement with faculty-based research. The proposed PhD in Management addresses this concern by presenting the option of dissertation work as either a single piece of coherent, original work or as a compilation thesis, which typically is comprised of a collection of three integrated, peer-reviewed papers that are book-ended by chapters drawing the papers together.

2.d.iii. Professional Licensing/Accreditation (if applicable)

TRSM received initial accreditation from the Association to Advance Collegiate Schools of Business (AACSB) in 2011. AACSB conducted an external Continuous Improvement Review of our program offerings in January 2017 and TRSM received re-accreditation for an additional five years. AACSB provides internationally recognized, specialized accreditation for business and accounting programs. AACSB accreditation ensures a level of currency and quality of offerings including the latest ideas in business, theories and practical skills. Less than 5% of the world's 13,000 business programs have earned AACSB accreditation. The programmatic scope of AACSB accreditation (i.e., degree programs and other programmatic activities to be included in the AACSB review process and subject to alignment with accreditation standards) is agreed upon through AACSB processes and meets the spirit and intent of the conditions and expectations outlined in eligibility criteria. The proposed PhD program will be subject to AACSB programmatic review but not until such time that the program has produced at least two years of graduates.

Over the past few years, TRSM and several Schools within it (e.g., School of Accounting and Finance, Information Technology Management, Hospitality and Tourism Management) went through a successful series of accreditation initiatives including:

- AACSB accreditation for a five-year period
- Chartered Professional Accountant (CPA) Accreditation for Post-Secondary Institutions
- Business Technology Management Association of Canada
- SMART Premium Plus accreditation by Tourism HR Canada organization
- Chartered Financial Analyst® (CFA) Institute University Recognition Program
- Association of University Programs in Health Administration (AUPHA)

These accreditations exemplify TRSM's strong interface with the world of business, our contribution to the community, the quality of our programming and strong foundation for scholarship.

2.e. Mode of Delivery and Graduate Degree Level Expectations

2.e.i. Planned Modes of Delivery

The proposed PhD in Management program follows a research model. A supervisor plays a critical role in guiding student training, especially at the research proposal development and dissertation writing stages. A key learning philosophy is that of acquiring proficiency in the discipline from having taken introductory courses in a previous degree.

At the beginning of each course, instructors will distribute a course outline specifying course learning objectives, expectations regarding student work and participation, and methods of evaluation. Instructors may supplement discussion and participation with online teaching and learning opportunities. To achieve proficiency in the stated learning outcomes, in particular, developing strong and diverse research skills, the program uses the following modes of delivery:

- face-to-face coursework, which includes lectures, discussions and presentations, as well as research papers and project assignments
- directed readings and independent study direct supervision, in the dissertation stage

The program will utilize differing delivery modes that are central to specific courses. In this proposed program, the research/academic instruction balance demands significantly more independent research culminating in a dissertation. The fundamentals of Management and Organization Theory and Research Methods are provided through coursework that features knowledge sharing and problem-solving exercises that require significant interaction with faculty.

Where a Directed Reading course is taken in lieu of a PhD level specialization elective, evaluation will be based upon the student's preparedness for meetings and ability to discuss the readings thoughtfully each week, with the majority of the mark based upon a term paper, usually a literature review and/or research proposal.

Another primary mode of delivery includes the Research Seminar series, where students will complete reading assignments in preparation for participation in a focused discussion. Instructors will assess students' participation in seminars, and may also choose to assign papers and presentations throughout the semester. By encouraging interaction among students and faculty, the seminar format enables students to teach and

learn from one another, challenge one another's perspectives, and collaborate in the inquiry process. In the graduate seminar, the instructor acts more as a facilitator, and guide who works to establish an environment in which students can enhance conceptual, critical, and communication abilities demanded by advanced research that contributes in original and innovative ways to scholarly knowledge. These small group meetings are a highly effective way of nurturing a critical, multidisciplinary perspective appropriate for doctoral study by fostering lively interdisciplinary interaction and the exchange of knowledge across different peer groups.

In addition, by providing teaching assistantships, the program offers students a valuable opportunity to gain some teaching experience. Taken together, the chosen program model and modes of delivery are effective and appropriate to reach the intended program learning outcomes and Degree Level Expectations.

Table 2.2: Learning Objectives and Methods of Achievement

Required Course Name	Mode of Delivery	Teaching Methods	LOs Addressed	GDLEs
Research Methods - Qualitative	Discussion Lectures Hands-on Article Comparisons Independent Reading	Hands-on Research Projects or Grant Development Survey Design and Data Collection Design Research Study Discourse or Content Analysis Presentation Qualtrics Actor Simulation Interview and Critique NVIVO Case Studies	LO1a, LO1b, LO2c, LO3a, LO3b, LO4c, LO5a, LO5b, LO6a, LO6b	1, 2a, 2b, 3b, 5, 6
Research Methods - Quantitative	Seminar Lecture Discussion	Quizzes Computer Exercises Qualtrics Discussion Literature Review	LO1a, LO1b, LO2c, LO3a, LO3b, LO4c, LO5a, LO5b, LO6a, LO6b	1, 2a, 2b, 3a, 3b, 4a, 4b, 4c , 5, 6
Management and Organization Theory	Discussion Presentation/Defense Independent Reading	Literature Review Paper Short Summaries Class Participation Presentation Critical Analysis of Readings	LO1a, LO1b, LO1c, LO2a, LO2c, LO3a, LO3b, LO4c, LO5a, LO5b, LO6a, LO6b	1, 2b, 3b, 4a, 4b, 4d, 5, 6
Research Seminar Course I	Guest Lectures Discussion Independent Reading	Participation Writing Assignment	LO1a, LO1b, LO2a, LO2a, LO2c, LO3a, LO3b, LO4a, LO4c, LO5a, LO5b, LO6a, LO6b	1, 2a, 3b, 4b, 4c, 5, 6

Research Seminar Course II	Guest Lectures Discussion Independent Reading	Participation Presentation Writing Assignment	LO1a, LO1b, LO1c, LO2a, LO2b, LO2c, LO3a, LO3b, LO4a, LO4b, LO4c, LO5a, LO5b, LO5c, LO6a, LO6b	1, 2a, 3b, 4b, 4c, 5, 6
Research Seminar Course III	Guest Lectures Discussion Independent Reading	Participation Presentation Writing Assignment	LO1a, LO1b, LO1c, LO2a, LO2b, LO2c, LO3a, LO3b, LO4a, LO4b, LO4c, LO5a, LO5b, LO5c, LO6a, LO6b	1, 2a, 3b, 4b, 4c, 5, 6
Elective - Digital Enterprise and Social Media	Independent Reading Problem Based Learning Seminar Debate Presentations	Literature Review Group Project/Technology Review Course Paper/Research Proposal Presentation	LO1a, LO1b, LO1c, LO2a, LO2b, LO2c, LO3a, LO5a, LO5b, LO5c, LO6a,	1, 2a, 2b, 2c, 3a, 3b, 4b, 4c, 5, 6
Elective – Real Estate Studies	Lectures Discussion Presentation Guest Lecture Independent Reading	Referee Reports and Presentations Analysis and Replication Assignment Term Paper Class Participation SAS, Stata and R	LO1a, LO1b, LO1c, LO2a, LO2b, LO2c, LO3a, LO3b, LO3c, LO4a, LO4b, LO4c, LO5a, LO5b, LO5c, LO6a, LO6b	1, 2a, 2b, 2c, 3a, 3b, 4a, 4b, 4c, 4d, 5, 6
Elective – Retail and Consumer Services	Lectures Independent Reading Presentation	Critical Analysis of Readings Seminar Contribution Quizzes Research Proposal	LO1a, LO1b, LO1c, LO2a, LO2b, LO2c, LO3a, LO3b, LO3c, LO4a,	1, 2a, 2b, 3b, 4a, 4b, 4c, 4d, 5, 6

		Research Paper	LO4b, LO4c, LO5a, LO5b, LO5c, LO6a, LO6b	
Elective – Strategy, Innovation and Entrepreneurship	Independent Reading Seminar Discussion Lecture Fieldwork Case	Review, analyze, and critically evaluate academic papers Case Development Engagement with Incubator/Start-ups	LO1a, LO1b, LO1c, LO2a, LO2b, LO2c, LO3a, LO3b, LO3c, LO4a, LO4b, LO4c, LO5a, LO5b, LO5c, LO6a, LO6b	1, 2a, 2b, 2c, 3a, 3b, 4a, 4b, 4c, 4d, 5, 6
Elective - Directed Reading Course	Independent Reading Discussion	Term Paper Review, analyze, and critically evaluate academic papers Course Paper/Research Proposal	LO1a, LO1b, LO1c, LO2a, LO2b, LO2c, LO3a, LO5a, LO5b, LO5c, LO6a,	1, 2a, 2b, 2c, 3a, 3b, 4b, 4c, 5, 6
Develop a Proposal	Independent Under faculty supervision	Paper/ research proposal	LO1a, LO1b, LO1c, LO2a, LO2b, LO2c, LO3a, LO3b, LO4a, LO4b, LO4c, LO5a, LO5b, LO5c, LO6a, LO6b	1, 2a, 2b, 2c, 3a, 3b, 4a, 4b, 4c, 4d, 5, 6
Candidacy Exam	Independent	Oral and written exam	LO1a, LO1b, LO1c, LO2a, LO2b, LO2c, LO3a, LO3b, LO4c, LO5a, LO5b, LO5c, LO6a	1, 2b, 3b,4b, 4c, 4d, 5, 6

Dissertation	Independent Under faculty supervision	Written dissertation	LO1a, LO1b, LO1c, LO2a, LO2b, LO2c, LO3a, LO3b, LO4b, LO4c, LO5a, LO5b, LO5c, LO6a	1, 2a, 2b, 2c, 3a, 3b, 4a, 4b, 4c, 4d, 5, 6

2.f. Assessment of Teaching and Learning and Graduate Degree Level Expectations (GDLEs)

There are various stages of formal assessment that unfold over the course of the proposed PhD in Management: coursework, research seminars, candidacy examination, and the dissertation.

Graduate Coursework

Students will take both required and elective courses, encouraging a broad range of study across one of the four of the program's specializations. Efforts in coursework will be assessed by course instructors using a variety of graded tools. All courses demand independently produced artefacts that may include essays, assignments or in-depth projects, which can include several graded components (essay/project proposal, annotated bibliography, workshop, etc.). Final course projects and papers are assessed for their level of critical engagement, breadth of knowledge demonstrated, grasp of the theoretical underpinnings of a line of argumentation or research, sophistication of methodology, originality of argument, and lucidity and concision of expression or method.

Research Seminars I, II and III:

The research seminars are mandatory that will be led by a qualified faculty member. The course will be assessed on a pass/fail basis. In Research Seminar I, Students will attend research presentations by TRSM faculty members and researchers, and critique and analyze the research designs and the presentation styles. They will also submit written analyses of assigned reading materials on topics related to professional development as an academic, such as strategies for improving productivity in academic writing, open-access publishing, and impacts of management research. Research Seminars II and III will require students to present work to the class and Ryerson community in conference poster presentation and oral presentation formats, in addition to attending presentations by other researchers organized by research centres and institutes across Ryerson University. They will critique their fellow students' work and presentations in a constructive and collegial atmosphere. The Research Seminar assignments permit assessment of the skills of oral presentation, research dissemination, and discussion facilitation. In seminar presentations, students are assessed on their ability to cogently and coherently summarize material for the audience, engage the audience in meaningful discussions, and present original research material in a compelling and accessible manner. The objective of the seminars is to keep students actively learning research ideas, some of which will become part of their dissertation work. The seminars also train students to produce original scholarship for presentation at a conference and/or suitable for peer reviewed publication.

Course instructors may also require students to submit additional material for assessment, including reading responses, peer evaluations, or participation assignments, such as online discussion boards or course websites/blogs.

Candidacy Examination

Students must demonstrate their expertise and ability to integrate the body of knowledge in the area of specialization, including major theories, relevant paradigms, and application of appropriate research methodology to major unresolved research questions.

The performance of a PhD candidate in the candidacy exam will be determined through a review of the candidate's responses to the open-ended questions by the supervisory committee in collaboration with professors with expertise in particular methodology.

Dissertation

Students must demonstrate that they are able to achieve tangible scientific contribution to the body of knowledge in the area of their chosen specialization.

The performance of a PhD candidate in the dissertation stage will be determined based on the novelty, merit, and publishability of the work by the supervisory committee.

2.f.i. Intended Teaching Methods

The proposed PhD courses and seminars, along with the electives cross listed with the MBA, MScM and MHA (CC), will be consistent with graduate level courses. A variety of relevant teaching methods have been identified by the faculty members responsible for course design and curriculum including the use of real life examples to illustrate concepts, discussion groups, reports, assignments and research papers.

Teaching methods will be used to reinforce and assess the learning outcomes identified for the PhD in Management. The list of learning outcomes in Table 2.2 supports a wide range of teaching methods to be utilized to reach the desired outcomes. Instructors will create transparent marking rubrics that provide detailed criteria for evaluation of specific program learning outcomes and doctoral degree level expectations.

In order to promote continuous improvement, Ryerson University has built in regular reviews of program effectiveness. As such, a variety of evaluation tools are used to promote and measure improvements. While there are contractual limitations to the nature of the interventions that may be imposed, there are a host of incentives and programs to promote improvements and innovations in teaching.

Advanced Research Methods – Qualitative

In the lectures, theoretical concepts will be discussed with practical application scenarios. The laboratory/tutorial sessions will be dedicated to practice solving problems/exercises designed to reinforce the learning of the concepts being taught in lectures. Furthermore, it will assist to develop associated web analysis and design skills. An individual project will be assigned to the students where they will demonstrate their understanding and skills by applying appropriate tools and technologies in designing a complete professional profile website for him/herself.

Advanced Research Methods – Quantitative

There is no textbook required for this course and different resources will be provided for each session. The course will be conducted in a seminar format, requiring students to not only attend the lectures, but also participate in discussions. The variety of teaching methods will include discussions, lectures, quizzes, and computer exercises. This course will help students in identifying, discussing and formulating a research problem, in selecting and applying appropriate quantitative research approaches and methods, and in presenting their results. Students will be able to recognize distinct nature of various research approaches and methodologies and apply them to examine a research problem Identify research problems, develop and justify research questions and hypothesis (if applicable) discuss ethical aspects of research and in particular those related to the research proposal.

Management and Organization Theory

Each week the professor will select two theories from a list of 40 for systematic analysis of their ontological assumptions, knowledge interests and epistemological implications. See course outline in Appendix B. For each of the two theories two empirical research papers will be reviewed and critically analyzed to enable the students to understand the special challenges of operationalizing the theories in organizational research. Students will be expected to write critical summaries of the textbook readings and selected research to enable the development a foundational understanding of the subject matter that can be operationalized in empirical research. For the final project each student will conduct a systematic literature review of selected areas.

Research Seminars

The research seminars will be led by a qualified faculty member. In Research Seminar I, students will attend research presentations by TRSM faculty members and researchers, and critique and analyze the research designs and the presentation styles. Students will work in various groups to brainstorm ideas and then present the group work with the entire class. They will also submit written analyses (individual work) of assigned reading materials on topics related to professional development as an academic, such as strategies for improving productivity in academic writing, open-access publishing, and impacts of management research. Individual analyses will be discussed in class as well.

Research Seminars II and III will require students to present work to the class and Ryerson community in conference poster presentation and oral presentation formats, in addition to attending presentations by other researchers organized by research centres and institutes across Ryerson University. They will critique their fellow students' work and presentations in a constructive and collegial atmosphere. A qualified instructor will lead the Research Seminar course and facilitate the in-class discussions on processing research presentations and student critiques. Students will work in various groups to brainstorm ideas and then present the group work with the entire class.

Digital Enterprise & Social Media Elective

As a doctoral level course, this course will be taught through a combination of extensive readings, problem-based learning, in-class debates, and oral presentations. Students will gain an understanding of the overarching concepts, ranging from technical to managerial, that are critical for the functioning of the digital enterprise. Students will develop the ability to identify theories relevant to research questions and apply them in the plan of a research study.

Through the teaching methods proposed, students will be able to integrate and critique a broad range of literature relevant to the broad area of digital enterprise; articulate the broader implications of research on digital enterprise; comprehensively and critically review the literature associated with the course objectives; evaluate the strengths and limitations of a range of various research approaches in relation to studying digital transformation and digital enterprises; synthesize and integrate findings from research into research reviews, critiques and proposals; and communicate complex ideas, issues, arguments and research findings clearly and effectively in both oral and written formats.

Real Estate Studies Elective

The class consists of a number of components. First, the instructor will give a lecture related to the topic and may include a paper of her/his own for discussion. When presenting these topics, the instructor will discuss the motivation and process of writing these papers so that students get a sense of how to initiate their own research.

Second, there will be one or two student presentations of the paper from the reading list.

Third, students will be asked to write a referee report on some of the most recent working papers. The instructor expects the class to have a lively discussion about these papers – so everyone should prepare to ask a lot of questions and engage in discussions. The presenter should make sure that students understand all the topics listed above and practice her/his presentation beforehand. This serves a good purpose – a student grows comfortable and confident in presenting in front of any audience.

Fourth, students will work on the commonly-used micro-level datasets, both collectively and individually, including data downloading, cleaning up, validating, analyzing and replicating using SAS, Stata and R. Throughout the semester, students will be assigned to conduct some basic analysis in SAS, Stata and R, and conduct replication of at least one important analysis in the papers that use these data sets, which may or may be on the reading list.

Finally, each student needs to submit a term paper at the end of the course. Students will work with the instructor and/or guest lecturer(s) to identify their research topics once the semester begins. A student's term paper is bound by the class duration – so time management is extremely important. The term paper will be evaluated on motivation, statement of research question, contribution to the literature, methodology, key findings, and clarity of writing.

Retail and Consumer Services Elective

This course features the use of four weekly articles that students are required to read prior to class. This course will incorporate teaching methods that require students to review, analyze, and critically evaluate four academic papers on a specific topic. The course will be conducted in a seminar format, requiring students to not only prepare the set of papers assigned, but also introduce a related paper that fits within the session's topic. The variety of teaching methods will include discussions, lectures, quizzes, and case development. The goal of this course is to assist students in developing an understanding of the major theoretical advances in the field of retail and consumer behavior. The course covers different types of methods, literature review, and how it functions within retail and consumer research. Students will gain an opportunity to generate research questions, formulate ideas, gather and analyze data (if applicable), and interpret data to formulate practical recommendations.

The key learning objectives and outcomes include integrating and critiquing a broad range of literature in management relevant to chosen area of research; comprehensively and critically review the literature associated with a research topic and evaluate the strengths and limitations of a range of various research approaches in relation to the discipline of management/specialization. Students should be able to contribute to new ideas, theories, skills, techniques, tools, and/or practices and synthesize and integrate findings from research into scholarly activities.

Students will be expected to model/facilitate the development of scholarship in novice and developing practitioners and demonstrate ethical behaviour consistent with academic integrity and the responsible conduct of research. Additionally students should be able to communicate complex ideas, issues, arguments and research findings clearly and effectively in both oral and written formats in a manner that is accessible and appropriate to a variety of audiences i.e. debate various types of knowledge and application of methods.

Strategy, Innovation, & Entrepreneurship Elective

There is no textbook required for this course. Students are required to read four weekly articles to read prior to each class. This course incorporates teaching methods that require the student to review, analyze, and critically evaluate a set of academic papers on a specific course topic each week. The course is conducted in a seminar format, requiring students to not only review the set of papers assigned, but also introduce a related paper that fits within the session's topic. The variety of teaching methods will include discussions, lectures, fieldwork, and case development.

The primary goal of this course is to assist students in developing an understanding of the major theoretical advances in the field of entrepreneurship and strategy. The course covers different types of methods, literature review, and their function within entrepreneurship and strategy research. Students will gain an opportunity to generate research questions, formulate ideas, gather and analyze data (if applicable), and interpret data to formulate practical recommendations. Students will be expected to engage with classroom, incubator and other start-ups activities at Ryerson.

Directed Reading Elective

A Directed Readings course is a tailored readings course, negotiated between an instructor and a student to enable that student to explore, in-depth, a particular topic in a specialization with the guidance of the faculty member. The course requirements will vary from one instructor to another but may typically include written and oral assignments based on research and analytical reasoning. All assignments will be geared to helping a student complete their thesis.
Evaluation will depend on three components where the weighting will be negotiated between faculty and student, but the final outcome should be approximately equivalent to an annotated reading list, a written assignment and a term paper of substance.

The Graduate Degree Level Expectations (GDLEs) Table 2.2 cross references and illustrates the mapping of methods and assessment employed in individual courses to the Degree Program's Graduate Level Expectations.

2.f.ii. Assessment Methods for Student Achievement and Learning Outcomes and Graduate Degree Level Expectations (GDLEs)

Success in the program will be defined by a mastery of disciplinary knowledge and a demonstrated ability to meaningfully engage in a range of problem-solving activities central to thinking in management. These are assessed both through specific assignments (research papers, assignments, comprehensive exam, dissertation, etc.) and through concrete steps taken towards professionalization through the qualifying research seminars.

The PhD Program Director will keep data on the results of assessment of the PhD learning outcomes plus program-level information such as:

- number of applicants, offers, and acceptances on a yearly basis
- student background qualifications (e.g., undergrad/graduate degrees, schools attended, GPA, GMAT scores, etc.)
- retention and graduation rates
- post-graduation employment
- continued support and funding from the University
- results of external reviews

All graduates will also participate in an exit interview with the PhD Program Director to describe their experience with the program – good and bad – as well as suggestions for improvement.

- Annual program of study review with doctoral supervisor and PhD Program Director
- Successful completion of research seminars
- Successful completion of core and elective program courses
- Successful completion of written and oral candidacy exam
- Successful completion of dissertation proposal defense
- Successful completion and defense of dissertation
- Acceptance of original research at an international conference and/or for publication in peer-reviewed journal
- Presentation of original research at an international conference
- Presentation of original research in a workshop at Ryerson University and/or another university
- Co-investigation in original research projects

All of the assessment information listed above will be reviewed annually in a meeting between the PhD Program Director and the TRSM Graduate Program Council Curriculum Committee. At this meeting, the full assessment package will be discussed in detail to determine if program goals are being met. As evidence is collected that curriculum, program requirements, or any other aspect of the program needs improvement, the PhD Program Director and the TRSM Graduate Program Council Curriculum Committee will move to make necessary changes.

- Graduate students must complete courses in accordance with their program's degree requirements.
- The course instructor assigns final course marks as letter grades or other defined status designations as appropriate.
- Credit towards program requirements will only be granted for a course where a student achieves a minimum grade of B.
- SRC requirements include, but are not limited to, conference/journal papers, research grant applications, candidacy examination, and dissertation. Graduate students in the PhD in Management program must complete a dissertation, creative work and/or an oral exam in accordance with their program requirements.
- Final evaluation for a SRC requirement is assigned by the Graduate Program Director, Supervisor, or examining committee as appropriate.
- Credit towards graduation requirements will only be granted where a final evaluation for a SRC requirement is indicated as completed.

- An examining committee will assess the written and/or creative work as well as a student's ability to defend it, where appropriate, by vote in accordance with the procedures.
- "Completed" is granted for work that meets the expectations of the examining committee; or "Fail" is granted for work that does not meet the expectations of the examining committee.
- Once students have begun SRC requirements, they will be assigned a performance designation by their supervisor/Supervisory Committee based on their annual progress reports. INP (in progress) is granted for satisfactory progress; or UNS (unsatisfactory) is granted for unsatisfactory progress.
- Any student who fails (i.e., earns lower than a B at) more than one course during the program will also face termination from the program.

2.f.iii. Student Performance and Graduate Degree Level Expectations (GDLEs)

TRSM places a significant emphasis on learning outcomes in our graduate programs. Both the Assurances of Learning (AoL) as part of the AACSB (Association to Advance Collegiate Schools of Business) accreditation review, and the Graduate Degree Level Expectations (GDLEs) are a baseline to assess whether TRSM graduate programs remain current with respect to higher education knowledge expectations and societal need. In addition, they allow us to ensure that we are providing students with the required skills for success after graduation. Existing quality assurance practices are well developed within TRSM and the appropriate assessment of learning outcomes will be applied to the proposed PhD in Management.

All coursework (written and oral) will use the same framework for student performance. The framework is based on a common rubric; however, additional items and specificity will be added as needed for individual course assignments. The framework is based on the Graduate Degree Level Expectations and the proposed program's Learning Outcomes.

Table 2.3: Evidence of Student Success and Course Learning Outcomes

Curriculum Name	GDLE	Learning Outcomes	Evidence Confirming Expectation Has Been Achieved
Research Methods - Qualitative	1, 4a, 4b, 4d	LO1a, LO1b, LO2c, LO3a, LO3b, LO4c, LO5a, LO5b, LO6a, LO6b	● Student demonstrates ability to locate and present cutting edge applications of qualitative methods for Management research ● Student properly utilizes the main approaches characterizing qualitative research in different situations and are able to assess the rigour and trustworthiness of qualitative inquiry ● Student can assess the applicability of a range of core qualitative approaches to their own research topics and understand how these approaches can be applied to conduct effective research ● Student can implement a range of qualitative data collection techniques including interviews, observations, and documents
Research Methods - Quantitative	1, 2a, 2b, 3a, 3b, 4a, 4b, 4c , 5, 6	LO1a, LO1b, LO2c, LO3a, LO3b, LO4c, LO5a, LO5b, LO6a, LO6b	● Students are expected to actively participate in the discussions. ● Student performance is evaluated by the instructor and the quality of participation will be monitored. ● Active participation involves: i) Being fully prepared; ii) Showing engagement with the material; iii) Offering insightful comments and questions; iv) Giving constructive criticism of others' contributions; v) Effective and brief communication ● Three exercises are considered to help students develop an understanding of how to use a particular statistical technique and then clearly interpret the results. ● For each assignment, student should hand in a 2-3 write up report that presents all the techniques used to answer the exercise as well as a result section representing all the findings. ● There will be three journal article readings and students are required to submit a 1500 word document containing what they have understood from the article with respect to the analytical techniques

			used.
Management and Organization Theory	1, 2a, 2b, 4a, 4b, 4d	LO1a, LO1b, LO1c, LO2a, LO2c, LO3a, LO3b, LO4c, LO5a, LO5b, LO6a, LO6b	● Student will be able to develop a systematic literature review written in a paper and expected to be of quality suitable for a refereed conference ● Students are expected to actively participate in the discussions. ● Student performance is evaluated by the instructor and the quality of participation will be monitored.
Research Seminar Course I	1, 2a, 2b, 2c, 3b, 4b, 4c, 4d, 5, 6	LO1a, LO1b, LO2a, LO2a, LO2c, LO3a, LO3b, LO4a, LO4c, LO5a, LO5b, LO6a, LO6b	● Modeling of appropriate behavior in seminars by faculty and peers
Research Seminar Course II	1,2a, 2b,2c,3b,4b, 4c, 4d,5, 6	LO1a, LO1b, LO1c, LO2a, LO2b, LO2c, LO3a, LO3b, LO4a, LO4b, LO4c, LO5a, LO5b, LO5c, LO6a, LO6b	● Grade on formal seminar presentation based on outcomes rubrics ● Modeling of appropriate behavior in seminars by faculty and peers ● The student demonstrates full knowledge in explaining core concepts
Research Seminar Course III	1, 2a, 2b, 2c, 3b, 4b, 4c, 4d, 5, 6	LO1a, LO1b, LO1c, LO2a, LO2b, LO2c, LO3a, LO3b, LO4a, LO4b, LO4c, LO5a, LO5b, LO5c, LO6a, LO6b	● Grade on formal seminar presentation based on outcomes rubrics ● Modeling of appropriate behavior in seminars by faculty and peers ● The student demonstrates full knowledge in explaining core concepts
Elective – Digital Enterprise and Social Media	1, 2a, 2b, 2c, 3a, 3b, 4a, 4b, 4d, 5, 6	LO1a, LO1b, LO1c, LO2a, LO2b, LO2c, LO3a, LO5a, LO5b, LO5c, LO6a,	● Explain and contrast basic concepts, frameworks and common theories related to digital enterprise ● Discuss and explain today's digital economy, knowledge intensive firms and knowledge workers

			● Describe the major roles and responsibilities of members in digital enterprise ● Identify different types of data and knowledge, and the ways in which knowledge is created, digitized, shared and used ● Develop and implement projects and strategies that utilize the latest digital technologies and approaches such as artificial intelligence and data analytics ● Identify and evaluate important issues related to running a digital enterprise such as ethics, ownership, intellectual property and knowledge sharing incentives ● Discuss and explain how organizations (both public and private) can use social media to achieve their organizational goals and improve organizational performance ● Apply different types of data analytics to derive insights from social media and other types of available data, including methods such as sentiment analysis, geo-based analytics, and social network analysis ● Demonstrate competence in analyzing business cases and developing reports for decision making related to managing a digital enterprise
Elective - Real Estate Studies	1, 2a, 2b, 2c, 3a, 3b, 4a, 4b, 4d, 5	LO1a, LO1b, LO1c, LO2a, LO2b, LO2c, LO3a, LO3b, LO3c, LO4a, LO4b, LO4c, LO5a, LO5b, LO5c, LO6a, LO6b	● There will be student presentations of a paper from reading list ● Students will be asked to write a referee report on recent working papers ● Students will work on the commonly-used micro-level datasets, both collectively and individually, including data downloading, cleaning up, validating, analyzing and replicating using SAS, Stata and R ● Each student will submit a term paper at the end of the course and present the paper

			• The term paper will be evaluated on motivation, statement of research question, contribution to the literature, methodology, key findings, and clarity of writing
Elective – Retail and Consumer Services	1, 2a, 2b, 2c, 3a, 3b, 4a, 4b, 4d, 5, 6	LO1a, LO1b, LO1c, LO2a, LO2b, LO2c, LO3a, LO3b, LO3c, LO4a, LO4b, LO4c, LO5a, LO5b, LO5c, LO6a, LO6b	• Key vehicle for learning is discussion of the assigned readings. • Each student will prepare a two-page summary that encapsulates the readings assigned to the weekly session. • Performance on quizzes that will test understanding of key theoretical concepts covered in the class • Perform an article critique based on the techniques covered in class - students are expected to provide a peer review of an article, identifying weaknesses in argumentation, methodology, and findings/conclusions
Elective – Strategy, Innovation, Entrepreneurship	1, 2a, 2b, 2c, 3a, 3b, 4a, 4b, 4d, 5, 6	LO1a, LO1b, LO1c, LO2a, LO2b, LO2c, LO3a, LO3b, LO3c, LO4a, LO4b, LO4c, LO5a, LO5b, LO5c, LO6a, LO6b	• A key vehicle for learning is discussion of the assigned readings. Each student is expected to prepare a two-page summary that encapsulates the readings assigned to the weekly session • Students will identify a topic area and relevant questions that they will address using field work. Students will interview participants in entrepreneurial or strategic roles to gain insights, as well as carrying out a review of relevant documents, and write a short report that describes the results of their investigation and links to theory from the course • Students will be required to develop a detailed article critique based on the techniques that we have covered in class. Students are expected to provide a peer review of an article, relevant to the course objectives and agreed in advance with the instructor, identifying weaknesses in argumentation, methodology, and findings/conclusions

			• The main deliverable of this course is a research term paper. The purpose of the paper is to explore a potential research stream of interest and, if possible, execute some of the planned research activities. Ideally, students should work with their supervisor to develop a topic of mutual interest. This paper will be graded by the instructor
Elective – Directed Reading Course	1, 2a, 2b, 2c, 3a, 3b, 4a, 4b, 4d, 5, 6	LO1a, LO1b, LO1c, LO2a, LO2b, LO2c, LO3a, LO3b, LO3c, LO4a, LO4b, LO4c, LO5a, LO5b, LO5c, LO6a, LO6b	• Student will be able to develop a systematic literature review written in a paper and expected to be of quality suitable for a refereed conference • The main deliverable of this course is a research term paper. The purpose of the paper is to explore a potential research stream of interest and, if possible, execute some of the planned research activities. Ideally, students should work with their supervisor to develop a topic of mutual interest. This paper will be graded by the instructor • Students will be required to develop a detailed article critique based on the techniques that we have covered in cl
Develop a Proposal	1, 2a, 2c, 3b, 4a, 4b, 4c, 5, 6	LO1a, LO1b, LO1c, LO2a, LO2b, LO2c, LO3a, LO3b, LO4a, LO4b, LO4c, LO5a, LO5b, LO5c, LO6a, LO6b	• Literature search supports that research is original • Direct assessment of progress by the Supervisor/Supervisory Committee for the dissertation • Demonstration of depth of understanding of the chosen areas of focus • Clearly states the purpose of the research with rationale and research questions are clearly posed • Articulates clear definitions given the purpose, design and methods of the proposed study
Candidacy Exam	1, 2a, 3b, 4b, 4c,5, 6	LO1a, LO1b, LO1c, LO2a, LO2b, LO2c, LO3a, LO3b, LO4c,	• The student successfully completed all requirements of the examination • Students demonstrate their depth and breadth of knowledge through the analysis, synthesis, and critical evaluation within the

		LO5a, LO5b, LO5c, LO6a	field. Students are expected to address a significant question or issue within the field that is relevant to their dissertation research
Dissertation	1, 2a, 2b, 2c, 3b, 4a, 4b, 4c, 5, 6	LO1a, LO1b, LO1c, LO2a, LO2b, LO2c, LO3a, LO3b, LO4b, LO4c, LO5a, LO5b, LO5c, LO6a	● Demonstrates comprehensive knowledge of current research in field and generates viable research question and a testable hypothesis ● Dissertation is clearly written and communicates high level material well with the reader and requires no or minimal changes to be ● Literature search supports that research is original ● Use of higher-order thinking skills such as applying, analyzing, evaluating, or creating demonstrates depth and breadth of knowledge ● Writing is publication quality ● Exceptional theoretical or applied significance that has excellent publication potential
Dissertation Defense	1, 2a, 3b, 4b, 4c, 5, 6	LO1b, LO2c, LO3a, LO4c, LO5a, LO6a	● Oral explanations are clear and to the point ● Use of higher-order thinking skills such as applying, analyzing, evaluating, or creating demonstrates depth and breadth of knowledge

2.f.iv. Promotion and Graduate Requirements (if applicable)

Not applicable.

2.g. Resources (Developed in Consultation with University Planning Office)

A preliminary assessment of financial viability of the proposed PhD in Management was carried by the University Planning Office as part of the Letter of Intent assessment. The proposal will not be submitted for Decanal approval prior to this preliminary assessment.

The assessment of financial viability of the full proposal will be carried out by the University Planning Office in consultation with the appropriate Deans.

This section should include the following headings:

2.g.i. Human, Physical, and Financial Resources

Physical Space provided within the TRSM building includes four dedicated classrooms for the graduate programs (TRS 3-099, 3-109, 3-119 and 3-129). Graduate students also have dedicated cubicles with personal storage spaces, a kitchen room, and the graduate student workroom (TRS 3-182). These dedicated spaces are accessible only to graduate students and staff. There are also six computer labs in the TRSM building. One lab, TRS 3-180 has 90 workstations shared between the TRSM graduate programs and the undergraduate students. The other five computer labs have 264 workstations and are available between classes. The proposed courses will be held during the traditional academic year and there will be adequate physical space and adequate technological resources to meet the needs of the program.

Doctoral students working on research affiliated with TRSM research institutes/centres that have physical space will also be housed there. There are current plans for future research space and flex space for researchers at 1 Dundas. The University has arranged for leased space at 1 Dundas and the space in currently under design and set-up. TRSM has been allocated approximately 3000 square feet in Suite YDI410.

Funding Opportunities

- Proposed target funding of $25,000 per year for four years from all sources
- Stipends from research grants held by supervisors, Research Assistantships, Teaching, GAships, Scholarships, Awards. A per Ryerson's policy for RAships, GAships and teaching, students can be employed for a maximum of 10 hours per week. (The rate of pay can be found on the Human Resources website in the CUPE Local 3904 Unit 3 Collective Agreement. Students may be offered a GA position by their program, and/or the positions will be posted on the HR website. The terms of employment of graduate students will be consistent with the collective agreements between Ryerson and its employee groups)
- Average annual management doctoral program tuition at Canadian Schools = $6,920
- Tuition range at Canadian Schools: $4,200.00 - $9,200.00
- Average funding at Canadian Schools: $25,538.00;
- Funding range at Canadian Schools: $15,000.00 - $33,000.

Table 2.4: Canadian Schools of Business Funding and Tuition

University	School	Tuition/year	Funding
University of Alberta	Alberta School of Business	$5,600	Based on credentials – application required
University of Calgary	Haskayne School of Business	$5,593	$25K/year plus tuition fee
Simon Fraser University	Beedie School of Business	Not available on website	Minimum $28K/year
University of British Columbia	Sauder School of Business	Financial support includes tuition for five years	$30K/year plus tuition fee
University of Victoria	Peter B. Gustavson School of Business	$8,200	Up to $20k per year
University of Manitoba	Asper School of Business	$5,000	Based on credentials – application required
Memorial University	Faculty of Business Administration	$6,000	Based on credentials – application required
Saint Mary's University	Sobey School of Business	$6,800	Up to $15K/year
Carleton University	Sprott School of Business	$8,100	Based on credentials – application required
University of Guelph	College of Business and Economics	$7,800	Not available on website
McMaster University	De Groote School of Business	$7,000	Minimum $20K/year
University of Ottawa	Telfer School of Management	$9,200	Up to $27K/year

Queen's University	Smith School of Business	$7,500	$33K/year
University of Toronto	The Rotman School	$8,500	$22 - $28K/year plus tuition fee
University of Waterloo	School of Accounting and Finance	$7,500	$22K/year
Western University	Ivey Business School	$8,300	Minimum $25K/year
Wilfred Laurier University	Lazaridis School of Business and Economics	$6,300	Minimum of $24K/year
York University	Schulich School of Business	$5,500	$32K/year
Concordia University	John Molson School of Business	$7,200	Based on credentials – application required
HEC Montreal	School of Management	$7,200	Based on credentials – application required
McGill	Desautels Faculty of Management	$4,200	Minimum $25K/year
Universite du Quebec a Montreal	School of Management Science	Not available on website	Minimum $20K/year

Course Development

The PhD in Management program will extend the MBA, MScM, and MHA (CC) graduate programs already in place at TRSM. We do not expect this program to take enrollment away from other existing programs (PhD or otherwise).

TRSM will need to initiate ten new PhD-level courses, including research seminar, management and organization theory, research methods courses and four specialization electives.

The first requirement of the proposed PhD in Management will be satisfied when candidates have demonstrated a broad knowledge of their field to the satisfaction of the supervisor, normally by the successful completion of an assigned program of courses. Table 2.5 reveals the number of required courses (including required courses in a specialization) of comparator programs across Canada. A review of the 22 PhD programs in Canada reveals that the number of required courses is in agreement with the requirements of those proposed. Additionally, the number of required electives at comparator schools varies depending on specialization but typically between two and four are required.

The courses listed in the proposed program will be offered at TRSM during the three semesters comprising the academic year, however, not all courses will be offered during any one semester. New courses in the specialization areas will be developed and the Office of the Dean is committed to the resources required for course development. It is unlikely, that given projected enrolments, to think all specializations will run in the first year of the program.

The proposed PhD in Management requires the completion of three elective courses, one of which will be taken at the PhD level. The remaining electives may be selected from courses offered by the TRSM MBA and/or from courses offered by other departments. PhD in Management students who would like to take graduate courses in other departments will require permission of the Supervisor. A Directed Reading course will be created when an individual student (or a very small group of students) wish to specialize in a topic not currently offered as a PhD elective in a given academic year". In this instance, the student and faculty member will create the learning goals, deliverables, resources, timeline, and mechanism for feedback. These courses will not appear on the timetable.

Along with development and delivery of the new courses, success of the PhD program will require that faculty be available as supervisors to graduate students, providing research and teaching experience and oversight. This will be in addition to their current teaching, scholarship, and service expectations.

Table 2.5: Required Courses for a PhD in Management at Comparator Schools

University	School	Length		Delivery
			Required Courses	
University of Alberta	Alberta School of Business	4 years	7-8 depending on specialization	Full time/On-site
University of Calgary	Haskayne School of Business	4 years	5	Full time/On-site
Simon Fraser University	Beedie School of Business	4 - 5 years	8	Full time/On-site

University of British Columbia	Sauder School of Business	4 - 6 years	7-8 depending on specialization	Full time/On-site
University of Victoria	Peter B. Gustavson School of Business	4 years	10	Full time/On-site
University of Manitoba	Asper School of Business	4 years	4-7 depending on specialization	Full time/On-site
Memorial University	Faculty of Business Administration	4 years	7-8 depending on specialization	Full time/On-site
Saint Mary's University	Sobey School of Business	4 years	7	Full time/On-site (thesis can be off site)
Carleton University	Sprott School of Business	3 years + thesis (FT)	8	Full or Part-time/On-site
University of Guelph	College of Business and Economics	2 years + thesis	12	Full time/On-site
McMaster University	De Groote School of Business	2 years + thesis	6-12 depending on specialization	Full time/On-site
University of Ottawa	Telfer School of Management	4 years	9	Full time/On-site
Queen's University	Smith School of Business	2 years + thesis	7-8 depending on specialization	Full time/On-site
University of Toronto	The Rotman School	4 - 6 years	8-10 depending on specialization	Full time/On-site
University of Waterloo		4 - 5 years	6	Full time/On-site
University of Western Ontario	Ivey Business School	4 - 5 years	5	Full time/On-site
Wilfred Laurier University	Lazaridis School of Business and Economics	4 years	11	Full time/On-site
York University	Schulich School of Business	4 - 6 years		Full time/On-site
Concordia University	John Molson School of Business	5 year program	7	Full time/On-site
HEC Montreal		4 years	7	Full time/On-site
McGill	Desautels Faculty of Management	4 - 5 years	7	Full time/On-site
Universite du Quebec a Montreal		4 years	11 depending on specialization	Full-time/On-site

2.g.ii. Quality Graduate Research Support

TRSM sets expectations for the nature and level of research and/or scholarly activity of its business faculty. With no exceptions, TRSM faculty members supervising PhD candidates will have PhD degrees and tenure-stream positions. PhD program faculty are expected to conduct original research and publish in appropriate disciplinary journals. We anticipate that these expectations for scholarly activity will continue, and we also expect that program faculty will advise and mentor PhD students and involve the students in their research. Program faculty will also be expected to continue their involvement with academic and/or professional associations to ensure visibility of TRSM and the PhD program in the academic community. Indicators of success of faculty will include but not be limited to:

- Scholarly productivity in disciplinary and/or interdisciplinary journals
- Participation in national conferences and invited research workshops
- Participation and leadership in relevant committees of applicable academic and professional associations
- Participation on editorial boards and editorship of scholarly journals
- Impact of research to management outcomes

Faculty members are also associated with TRSM's 14 Research Centre/Institutes and play a central role in research and educational activities that span a wide variety of disciplinary topics. The Centres/Institutes build close relationships with organizations in a wide variety of industries and work with them in providing an active forum where communities can gather to exchange and cross-pollinate ideas and share expertise on management related issues. Each of the Centres/Institutes will provide our PhD candidates with an environment where they will have access to funding support mechanisms, external grants to attend and present at conferences, relevant databases and an extensive set of seminars and events.

Additionally, the Yeates School of Graduate Studies (YSGS) is a resource for graduate students seeking help with many aspects of graduate student life including funding applications, writing and editing, and navigating the job search process. Instruction, information and research-skills support currently available to graduate students include regular or occasional workshops by Library staff such as Navigating the Library Resources, Census and Business Data Made Easy: Get Mapping with Simply Map Canada, and Advanced Library Research Methods for Graduate Students. The current workshop schedule is available at: http://library.ryerson.ca/info/whats-new/workshops-and-events/. Workshops specifically tailored for graduate students are available at: http://library.ryerson.ca/services/grads/gworkshops/

YSGS also offers the "Future Smart" program, Grad Café, and numerous events to facilitate networking, professional development, and career success.

There is a rich source of potential support from individuals, groups, and agencies external to TRSM. TRSM is committed to maintaining active connections with business industry leaders. Since 2013, TRSM has actively recruited 200 leaders from across industry who serve as members of Program Advisory Councils (PAC). PACs meet three times annually, and provide an important mechanism for TRSM to remain current with and connected to professional practice and leaders of industry. Although a PAC for the PhD program is not envisioned at this time, existing PACs and the Dean's Advisory Council have the opportunity to impact the programs, research activities, and local and international partners for a great number of students who will be Canada's future business leaders.

2.g.iii. Faculty Expertise

TRSM faculty members in areas related to the proposed specializations have the necessary qualifications, experience, and expertise to ensure that the PhD in Management provides a rigorous and rewarding program of study that prepares students to become productive members of the academy. Faculty members have received advanced training in a variety of disciplines and methodological orientations, and have been instrumental in training research assistants, graduate students, and post-doctoral fellows within TRSM and Ryerson, as well as at other academic institutions. Additionally, given that 60% of our faculty obtained their academic credentials outside of Canada, TRSM faculty bring a global perspective to management issues, which is essential to understanding and effectively tackling problems in the contemporary globalized world.

Research Output

Central to the TRSM mission is the goal to increase research intensity and to promote impactful and relevant research. TRSM strives to be a recognized leader in societally relevant, rigorous research with local, national, and global impact. Consequently, the intellectual contributions of faculty in TRSM include both peer-reviewed journal (PRJ) articles and a range of other intellectual contributions (IC) that reflect our mandate of producing scholarship that is geared toward innovative problem-solving through a social responsibility lens – reports, books, book chapters, conference papers, policy papers, software development, etc. In total, 3,147 ICs were made over the period of 2013–2017. The majority, 89% of faculty members produced ICs during the five-year period. Total annual ICs reached 765 in 2017 versus 488 in 2013, representing a 57% increase in research output in five years.

TRSM's unique collection of Schools and Departments greatly expands potential students' options for faculty supervisors. The diversity of our faculty's interests and disciplinary backgrounds is celebrated at TRSM and expands our audiences reached. Between 2013 and 2017, TRSM core faculty authored 527 PRJ articles, 60% of which are classified as being practice-focused, and therefore relevant to industry, community, and government stakeholders. TRSM saw a 45% increase in PRJ output over the five years, from 93 in 2013 to 135 in 2017. Table 2.6 below summarizes research output by TRSM core faculty in the 2013-17 time period.

Table 2.6: Research Output of TRSM Faculty

Research Type	2013	2014	2015	2016	2017
Peer Reviewed Journal Articles	93	92	96	109	135
Papers in academic conferences (peer-reviewed)	221	234	206	205	221
Papers in professional conferences	0	0	0	6	9
Published Case Studies	1	1	2	1	1
Other R&D Publications	35	77	74	65	56

Research Funding

Total external research funding in the most recent five-year window (2013-2018) reached $14,113,404.79, up 93% from the $7,320,187.31 total in the previous five-year window (2008-2013). An area in which TRSM excels is societally-relevant research in collaboration with industry, government, community and other academic partners. There has been a tremendous increase in externally funded projects with industry and non-profits, which now account for over half of the grants received (56%). In the past five years, industry/non-

profits have contributed over $6 million to support research projects with TRSM faculty members. In addition to industry/non-profit funding, TRSM faculty secured $3.3 million in funds from all three of the tri-agencies (SSHRC, NSERC, and CIHR) – a unique feat for a business school and indicative of TRSM's disciplinary diversity.

Faculty Qualifications

TRSM employs appropriately qualified faculty to accomplish the mission and goals of the School. All new tenured and tenure-track hires must possess a terminal qualification. Of note, TRSM secured an additional 20 tenured or tenure-track positions for the school year 2016-17 & 2017-18. TRSM efforts to enhance research intensity and quality are well underway and include: a competitive post-doctoral fellowships program; providing formal and informal mentoring; integrating research into teaching to enhance the student learning experience at all levels; and increasing internal and external communication about research in TRSM.

The academic backgrounds of faculty in the proposed specialization areas cover a wide range of disciplines, including business administration/management, computer science, computer engineering, information systems, sociology, recreation and leisure studies, geography, information studies, urban planning/studies, kinesiology, industrial engineering, law, economics, and finance. This diversity of academic expertise translates into a faculty complement that has solid foundations in a wide variety of quantitative and qualitative methodological approaches and techniques grounded in the social sciences, natural sciences, and engineering.

Expertise in Digital Enterprise & Social Media

TRSM has researchers spanning multiple departments/schools conducting research in the area of digital enterprise and social media. Included in this cluster are a current Canada Research Chair (Gruzd), a former Canada Research Chair (Middleton), as well as two members of the Royal Society of Canada's College of New Scholars, Artists and Scientists (Gruzd, Middleton). In addition to accomplished scholars, four TRSM research centres and institutes (Table 2.7) directly support research activity in this area, including, the **Social Media Lab**, the **Institute for Innovation and Technology Management**, the **Cybersecurity Research Lab**, and the **Inclusive Media & Design Centre**. Below is an overview of the research expertise of faculty members conducting research related to the digital enterprise and social media specialization:

- Dr. Catherine Middleton is a former two-term Canada Research Chair (Tier II) in Communication Technologies in the Information Society who studies policy issues in **digital/mobile communication**. In 2014, she was named as a Member of the Royal Society of Canada's College of New Scholars, Artists and Scientists.
- Drs. Youcef Derbal and Aziz Guergachi are experts in **modeling of complex problems**.
- Dr. Linying Dong studies **business processes in the enterprise**.
- Dr. Sameh Al-Natour studies **behavioral decision making** and **e-commerce**.
- Dr. Deborah Fels studies the use of information **technologies to improve inclusivity** and is the Director of the Inclusive Media & Design Centre.
- Drs. Ozgur Turetken and Morteza Zihayat Kermani research the **application of big data analytics techniques to individual-level decisions**.
- Drs. Farid Shirazi and Youcef Derbal have technical and research expertise in **big data and cloud computing**.

- Drs. Anatoliy Gruzd and Bouchaib Bahli examine issues involving **social media**. Dr. Gruzd is a Canada Research Chair (Tier II) in Social Media Data Stewardship and was named a Member of the Royal Society of Canada's College of New Scholars, Artists and Scientists in 2017.
- Dr. Ojelanki Ngwenyama is an expert in **organizational innovation and design**, with an emphasis on finding innovative solutions to real-world technology management problems. Dr. Ngwenyama is the Director of the Institute for Innovation and Technology Management.
- Drs. Avner Levin and Atty Mashatan conduct research in **cybersecurity** – Levin focuses on the protection and legal regulation of personal and private information, while Mashatan's work involves information systems security, cryptography, and combinatorics. Dr. Mashatan is the Director of the Cybersecurity Research Lab.
- Drs. Julien Meyer, Aziz Guergachi, and Youcef Derbal research the **application of information technologies in the healthcare sector**. Dr. Meyer examines the transformative role of information technologies in healthcare organizations, while Guergachi and Derbal apply complex modeling to better understand disease and improve health outcomes.

Table 2.7: Research Centres and Institutes Supporting Scholarship in Digital Enterprise & Social Media

Centres/Institutes/Labs	Description
Social Media Lab	Studies how social media is changing the ways in which people communicate, disseminate information, conduct business and form communities, and how these changes impact the social, economic and political structures of modern society.
Institute for Innovation and Technology Management	Aims to find innovative solutions to real-world technology management problems. The Institute understands that these problems are interdisciplinary and, as such, any solution must go beyond traditional views of organization and technology.
Cybersecurity Research Lab	Aims to be a centre of excellence in cybersecurity research and development by conducting cutting-edge research, training the next generation of cybersecurity experts, and spearheading a crucial and ongoing dialogue with the Information and Computer Technology (ICT) industry.
Inclusive Media & Design Centre	Designs, creates, and evaluates inclusive media and technology such as Tecla Shield 3.0 assistive technology, Voicewriter captioning software, and WebMoti, which allows children with Autism Spectrum Conditions to control their social and auditory presence at school.

Expertise in Real Estate Studies

Researchers in the area of real estate studies have backgrounds in a variety of disciplines, including urban planning/studies, geography, finance, and economics, providing a solid foundation for a Candidacy examination of real estate issues. While situated within the Real Estate department, real estate scholars collaborate with TRSM colleagues in Retail Management and Finance, as well as with researchers across

Ryerson University in geography and environmental studies and urban planning. Research in this cluster is supported by two TRSM research centres – the **Urban Analytics Institute** and the **Centre for the Study of Commercial Activity**, with additional infrastructure provided by two other Ryerson University centres of excellence focused on the built environment – the City Building Institute and the Centre for Urban Research and Land Development. Below is an overview of the research expertise of faculty members conducting research related to the real estate studies specialization:

- Dr. Murtaza Haider focuses on the **use of analytics and statistical models to analyze issues related to urban economics, housing markets, urban planning, and transport planning**. Dr. Haider is the Director of the Urban Analytics Institute.
- Dr. Cynthia Holmes studies **real estate finance and housing policy**.
- Dr. David Scofield examines **microfoundations of real estate markets**, **real estate investment and development**, and the **effects of organization, networks and institutions on liquidity and transaction costs in commercial real estate**.
- Dr. Youngme Seo researches **mortgage default**, **real estate finance**, **urban housing economics**, and **spatial econometrics**.
- Dr. Dogan Tirtiroglu focuses on real estate (in particular **REITs and house price indices**), **banking**, and **corporate finance**.
- Dr. Tony Hernandez is an expert in **retail location decision-making, strategy, planning, and analytics**. He is the Director of the Centre for the Study of Commercial Activity and the current Eaton Chair in Retailing. As Eaton Chair in Retailing, Dr. Hernandez is tasked with fostering retail research excellence in Canada through the dissemination of results-oriented research and information that would profile the strategic significance of the Canadian retail economy.

Table 2.8: Research Centres and Institutes Supporting Scholarship in Real Estate Studies

Centres/Institutes/Labs	Description
Urban Analytics Institute	Builds relationships within the public, private and non-profit sectors to identify urgent urban challenges and help them implement smart city solutions. The Institute collaborates with partners in research as well as in the implementation of technologies involving big data analytics, deep learning, and artificial intelligence.
Centre for the Study of Commercial Activity	Innovatively applies location-based research, education and outreach to enhance the competitiveness of the consumer service sector for the benefit of Canadian society.

Research Collaboration and Internationalization

Research collaboration and internationalization are increasingly important in the academy. They ensure the continued intellectual development of scholars as networks grow, partnerships form, and different types of knowledge are mobilized across the globe. TRSM faculty have put a great deal of emphasis on building connections locally, nationally, and globally, which is enhancing the quality and impact of their research. Students in the PhD in Management program will have the opportunity to interact, learn, and conduct

research with partners from across the globe, enriching their academic experience and providing a head-start in building relationships and networks that will serve them well in their careers.

In the past two years, TRSM researchers have collaborated with over 450 external partners from government, industry, non-profits, and community organizations and have made significant contributions to projects funded by other global entities such as the European Union and the Western Norway Research Institute. These activities are in addition to collaborative research activities conducted as part of joint research agreements with international academic institutions such as the Hong Kong Polytechnic University, Tsinghua University School of Economics and Management and Fudan University. Many scholarly partnerships have been spearheaded by several of the TRSM research institutes and centres such as the Canada-China Institute for Business and Development.

For example, the Entrepreneurship Research Institute is devoted to investigating the role that entrepreneurs play in modern economies. In keeping with the reputation of TRSM as a leader in entrepreneurial education, ERI focuses on research of high academic and intellectual value, with clear applicability to practitioners in the business community:

- The Government of Bhutan reached out to ERI for help in understanding the role of entrepreneurship as a viable career path for youth living in rural areas of the country who are unemployed and lack adequate education. The research project has resulted in many academic publications and an opportunity for TRSM student research assistants to participate in a unique international research collaboration. It has already provided educators and policy-makers in Bhutan with vital information to inform their development of actionable strategies for increasing entrepreneurship among its at-risk youth.
- ERI continues to work with Futurpreneur Canada to implement a research program devoted to better understanding the causes of successful mentoring and support for new youth-based ventures. Based on this success, it continues to expand this work to include similar research programs with equivalent partner organizations in Australia, New Zealand, South Africa, and UK.

In the last decade, international research collaboration at TRSM has intensified. Cooperation with academic colleagues around the globe is an important priority for TRSM. TRSM is achieving global impact through strategic linkages and projects with other parts of the world. In the past two years, research centres have hosted international visiting scholars and partnered with researchers in 36 different countries such as China, South Africa, Australia, India, Germany, Mexico, Russia, Israel to name a few.
Our international recognition is expanded further by high profile research service activities:

- 88 editorial roles (e.g. editorships, associate editorships, guest editorships) at international journals and conferences, including the *Journal of Business Ethics*, *European Journal of Information Systems*, *Journal of Sustainable Tourism*, and the *Association for Information Systems*.
- 24 keynote presentations at international symposiums and conferences, including the 2nd UNWTO Conference on Destination Management in the Mediterranean, the American Council for the Blind Conference, and the University of the West Indies Sustainable Tourism Symposium.
- 121 editorial board memberships at international journals and conferences, including the *Journal of Business Research*, *Journal of Information Technology*, and the *International Journal of Contemporary Hospitality Management*.
- 128 chair/organizational roles at international workshops, symposia, and conferences, including the Academy of Management Conference, International Conference on Human-Computer Interaction, and the International Conference on Social Media & Society – an annual gathering of leading social media researchers from across the globe organized by TRSM's Social Media Lab.

Expertise in Retail and Consumer Services

Researchers in the area of retail and consumer studies are situated across TRSM's departments/schools, with a concentration in Retail Management, Marketing Management, and Hospitality & Tourism Management. Their backgrounds in marketing, consumer behavior, psychology, geography, and management combined with expertise of colleagues in other department/schools conducting scholarship in business analytics, real estate, international/global business, and entrepreneurship & strategy, provide a solid foundation for advanced studies of the retail industry and consumer behavior. Research activity in this cluster is further bolstered by three research centers and institutes (Table 2.9), including the Institute for Hospitality & Tourism Research, the Future of Sport Lab, and the Centre for the Study of Commercial Activity, the latter of which is headed by the Eaton Chair in Retailing (endowed Chair). Below is an overview of the research expertise of faculty members conducting research related to the retail and consumer studies specialization:

- Dr. Hong Yu researches **consumer behaviour and marketing strategies in the context of the experience economy**, with an emphasis on the shopping experiences of particular consumer groups and the role of product innovation and retail environment and service designs in marketing strategies.
- Dr. Donna Smith examines **business-to-business (B2B) partnerships in the retail industry**.
- Drs. Joanne McNeish, Norman Shaw, Chris Gibbs, and Anthony Francescucci explore **technology and innovation adoption by consumers and businesses**.
- Dr. Seung Hwan (Mark) Lee focuses on the **effect of sensory marketing and virtual reality (VR) on consumer behaviour**.
- Drs. Jenna Jacobson and Donna Smith analyze the **consumer and producer perspectives of digital technologies** with a focus on social media, branding, and user behaviour.
- Dr. Tony Hernandez is an expert in **retail location decision-making, strategy, planning, and analytics**. He is the Director of the Centre for the Study of Commercial Activity and the current Eaton Chair in Retailing. As Eaton Chair in Retailing, Dr. Hernandez is tasked with fostering retail research excellence in Canada through the dissemination of results-oriented research and information that would profile the strategic significance of the Canadian retail economy.
- Dr. Frances Gunn researches **service quality and innovation in retail services**.
- Drs. Cheri Bradish and Katie Lebel conduct research in **sport marketing and business strategy**. Dr. Bradish is the Director of the Future of Sport Lab and the current Loretta Rogers Research Chair in Sport Marketing.
- Dr. Martin Pyle researches **word-of-mouth**, developing theory to explain why people choose certain language to share their experiences, and the effect this has on people who receive the message.
- Drs. Frederic Dimanche, Rachel Dodds, Sonya Graci, and Tom Griffin examine **marketing, consumer behaviour, and service design in the hospitality and tourism sector**. Dr. Sonya Graci is the Director of the Institute for Hospitality & Tourism Research.

Table 2.9: Research Centres, Institutes and Labs Supporting Scholarship in Retail and Consumer Studies

Centre/Institute/Lab	Description
Centre for the Study of Commercial Activity	Innovatively applies location-based research, education and outreach to enhance the competitiveness of the consumer service sector for the benefit of Canadian society.
Future of Sport Lab	Collaborative lab for sport innovation and research supported and co-managed by Maple Leaf Sports &

	Entertainment Ltd. (MLSE). FSL aims to be Canada's leader in fostering innovative sport business solutions and technologies, along with related research and insights.
Institute for Hospitality & Tourism Research	Works with industry partners to conduct applied research projects that provide our students with opportunities to learn and grow, and that have both scholarly value and significance to the tourism and hospitality field.

Expertise in Strategy, Innovation & Entrepreneurship

Strategy, innovation, and entrepreneurship are core themes that permeate through all research at TRSM. Although they are essential components of all business and management scholarship, the in-depth study of the mechanics of strategy, innovation, and entrepreneurship is situated within the Entrepreneurship & Strategy department, with several faculty members in Global Management Studies also contributing a great deal of scholarship in these areas. In addition, studies in strategy, innovation, and entrepreneurship are enhanced by incubators and experiential learning zones that comprise Ryerson's well-developed entrepreneurship ecosystem. Examples include the Digital Media Zone and the Brookfield Institute for Innovation and Entrepreneurship.

Within TRSM, several research centres and institutes (Table 2.10) also provide necessary infrastructure for the advancement of knowledge in this cluster, including the **Entrepreneurship Research Institute**, the **Canada-China Institute for Business and Development**, the **Diversity Institute**, the **Institute for Innovation and Technology Management**, and the **Institute for the Study of Corporate Social Responsibility**. Below is an overview of the research expertise of faculty members conducting research related to the strategy, innovation, and entrepreneurship specialization:

- Dr. Kim Bates explores **innovation and corporate governance**.
- Dr. Wendy Cukier is an expert in **social innovation strategy** and led Ryerson's social innovation strategy during her time as Vice-President, Research and Innovation. Dr. Cukier has received numerous honours in recognition of her work, including the Governor General's Meritorious Cross, and in 2013 was named as one of Canada's Top 25 Women of Influence. She is currently the Director of the Diversity Institute.
- Dr. Ken Grant examines **knowledge management and innovation**.
- Dr. Mary Han is recognized for her work on the relations between **organization adaptation, multinational strategy in emerging markets, strategic entrepreneurship and business model innovation.**
- Drs. Alison Kemper, Deborah de Lange, and Kernaghan Webb research the **impact of social and environmental issues on business strategy/corporate social responsibility**. Dr. Webb is Director of the Institute for Corporate Social Responsibility.
- Dr. Andre Laplume studies the **competitive and institutional barriers** preventing potential entrepreneurs from launching new ventures successfully as well as the **preparatory experiences of entrepreneurs** that help to develop entrepreneurial capacity.

- Dr. Charlene Nicholls-Nixon studies **entrepreneurship in emerging markets** and the **role of start-up incubators in entrepreneurship**. Dr. Nicholls-Nixon is the Director of the Entrepreneurship Research Institute.
- Dr. Dave Valliere researches **entrepreneurial finance** and the **social and cultural determinants of entrepreneurial intent**.
- Dr. Philip Walsh examines **innovation, sustainability, and finance in the energy sector**.
- Dr. Sean Wise studies **venture finance and start-ups**.
- Drs. Howard Lin, Horatio Morgan, and Sui focus on **international business strategy**, including international joint ventures, foreign direct investment, emerging markets, cross-cultural & comparative management, and transnational & immigrant entrepreneurship. Dr. Lin is the Director of the Canada-China Institute for Business and Development.
- Dr. Ojelanki Ngwenyama is an expert in **organizational innovation and design**, with an emphasis on finding innovative solutions to real-world technology management problems. Dr. Ngwenyama is the Director of the Institute for Innovation and Technology Management.
- Drs. Ron Babin and Joanne McNeish research **disruptive innovation**, with Dr. Babin focusing on IT and Dr. McNeish focusing on consumer products.

Table 2.10: Research Centres, Institutes and Labs Supporting Scholarship in Strategy, Innovation, and Entrepreneurship

Centres/Institutes/Labs	Description
Entrepreneurship Research Institute	Devoted to investigating the role that entrepreneurs play in modern economies. The Institute focuses on research of high academic and intellectual value, with clear applicability to practitioners in the business community. ERI also plans periodic seminars and symposia on topics of interest to scholars of entrepreneurship.
Canada-China Institute for Business and Development	Aims to build and advance understanding of China through research, innovative educational and training programs, and influential public events. The Institute serves as a centre of excellence for education and knowledge dissemination of China, past and present day, to Canadian business, academics, policy makers, governments and other stakeholders looking to do business with China and/or to partner with Chinese Organizations.
Diversity Institute	Works with organizations to develop customized strategies, programming, and resources to promote new, interdisciplinary knowledge and practice about diversity with respect to gender, race/ethnicity, Aboriginal peoples, abilities, and sexual orientation.

Institute for Innovation and Technology Management	Aims to find innovative solutions to real-world technology management problems. The Institute understands that these problems are interdisciplinary and, as such, any solution must go beyond traditional views of organization and technology.
Institute for the Study of Corporate Social Responsibility	Dedicated to becoming a Centre of Excellence on social responsibility issues, producing and disseminating high quality SR research, holding events that explore how SR can be effectively implemented and the challenges associated with such implementation, and to bringing together actors from government, private sector, and civil society (including academia) for constructive learning on social responsibility.

For details on research output by faculty member please see Appendix D: Faculty Qualifications and CVs.

2.g.iv. Supervisory Loads and Relationship

Every doctoral student will be guided during his/her period of registered study by (a) supervisor(s) with suitable academic qualifications, appropriate expertise in the agreed area of the student's research topic, and an acceptable level of supervision experience. The eligibility criteria are consistent with the policies and processes governing membership in the YSGS, at Ryerson University. Membership with YSGS signifies commitment to scholarship, research and creative (SRC) activities, productive supervisor/student relationships, and excellence in graduate education.[41]

The supervisory relationship and obligation is guided by Ryerson University Policy 164. The role of the faculty advisor or supervisor is to provide academic advising and monitor the student's progress toward the completion of the program. Where a dissertation, thesis or MRP is part of a student's curriculum, Policy 164 stipulates that student's supervisor shall:

- meet regularly with the student
- review the student's proposal and recommend its approval to the GPD normally not less than one to two terms (depending on the length of the program) prior to the expected date of program completion
- complete the supervisor's portion of the student's annual Progress Report
- evaluate the readiness of the MRP, thesis or dissertation (and the paper or project if required) to be examined orally, and make a recommendation to the GPD regarding a date for the defence and the composition of the Examining Committee
- ensure that a copy of the student's work is sent to each member of the student's Examining Committee when required
- uphold any graduate program specific expectations of supervisors

[41] https://www.ryerson.ca/graduate/faculty-staff/membership-policy/

Graduate education at Ryerson University is overseen by the YSGS Council. The council deals with such issues as the development and evaluation of new graduate programs and policy that is relevant to graduate programs and students. The council is comprised of the Vice-Provost and Dean of Graduate Studies as well as affiliated faculty members from each of Ryerson's faculties, graduate program directors and students.[42]

Ryerson University Policy 164 provides the following guidance on the membership of a student's Supervisory Committee:

- composed of two to four members, who should remain on the committee throughout the student's research, including: the student's supervisor(s) and one faculty member from the student's program who is a member of YSGS
- may include a non-academic expert professional in the field of research or a Ryerson University faculty member who is not a member of YSGS
- is recommended by a student's supervisor to the GPD for approval
- the GPD shall forward to the Vice-Provost and Dean, YSGS the recommendations for committee appointments in accordance with program expectations no later than the beginning of the third year of study

Additionally, the policy states that the Supervisory Committee shall:

- be chaired by the student's supervisor
- at minimum, meet once annually with the student
- review the student's preparedness and establish a timeline of expected progress
- update the GPD when the student successfully completes a non-course program component and has set a research topic
- update the GPD when the student is unsuccessful in completing a non-course program component and provide detailed reasons for the decision to the GPD, Vice-Provost and Dean, YSGS, and the student within two weeks of the failed attempt
- formally approve the dissertation proposal
- complete any requirements as indicated by the graduate program
- evaluate the readiness of the dissertation to be examined and, with a minimum of majority agreement, make a recommendation to the GPD regarding the formation of the Examining Committee

The chair of a given student's PhD supervisory committee must be in the student's specialization option, and other committee members may come from any of the relevant disciplines. If we look at TRSM faculty who can serve as a PhD supervisor, we expect about 46 across TRSM – see Appendix D: Faculty Qualifications and CVs. If we estimate that there will be 24 PhD students in the program by year 4 of the program, a rough calculation of the student/faculty ratio is approximately 0.52, which is consistent with the 0.65 ratio for other schools according to AACSB data.

Eligible Teaching and Supervisory Personnel

YSGS membership consist of three groups: those who are RFA faculty employees of Ryerson University (Assistant, Associate, Full Professors and Limited Term Faculty), those who are not (research scientists,

[42] https://www.ryerson.ca/graduate/faculty-staff/membership-policy/

research associates, postdoctoral fellows, adjunct professors, and visiting professors) and retired members of YSGS who continue to meet the membership criteria.

Role	Eligibility and Requirements
Teaching Faculty	Faculty tenure status, rank, and degree: ● Tenure-track Assistant Professors holding a doctoral degree ● Tenured faculty of any rank holding a doctoral degree Additional requirements: ● Member of Yeates School of Graduate Studies ● Evidence from graduate courses taught in the previous five-year period; student evaluations, peer evaluations and where appropriate, the quality of the MScM thesis/MRP supervised. ● May only teach one doctoral-level course per year
Primary Supervisors	Faculty tenure status, rank, and degree: ● Tenure-track assistant professors with a doctoral degree ● TRSM tenured faculty of any rank who possess a doctoral degree Additional requirements: ● Previous experience as a graduate student supervisor ● Possess “full” or “emeritus” membership status with Yeates School of Graduate Studies ● Evidence from graduate courses taught in the previous five-year period; student evaluations, peer evaluations and where appropriate, the quality of the MScM thesis/MRP supervised. ● Demonstrate substantial and relevant research accomplishments in the relevant discipline and demonstrate that they intend to remain in the role for the normal duration of a doctoral program. ○ must publish three or more peer reviewed articles in their field over the previous five-year period with at least one high quality scholarly work or be awarded a tri-council competitive research grant. ○ evidence of at least two other forms of scholarship – this includes activities such as journal editorships, editorial committee memberships, published peer-reviewed proceedings, peer-reviewed presentations at conferences etc. ● Ideally, be able to demonstrate financial support to a doctoral candidate, and/or demonstrate that they are engaged in seeking grants. A Supervisor must clearly state any expectations associated with the financial support arrangement such as progress in the program and contribution to research.

Co-Supervisors	Faculty tenure status, rank, and degree: ● Tenure-track assistant professors with a doctoral degree ● Tenured professors of any rank with a doctoral degree Additional Requirements: ● Must share PhD student supervisory responsibility with a primary supervisor as defined above. ● Member of Yeates School of Graduate Studies ● Demonstrate substantial and relevant research accomplishments in the relevant discipline and demonstrate that they intend to remain in the role for the normal duration of a doctoral program. ○ must publish two or more peer reviewed articles in their field over the previous five-year period with at least one high quality scholarly work or be awarded a tri-council competitive research grant. ○ evidence of at least one other form of scholarship – this includes activities such as journal editorships, editorial committee memberships, published peer-reviewed proceedings, peer-reviewed presentations at conferences etc.
Supervisory Committee Members	Faculty tenure status, rank, and degree: ● Tenure-track assistant professors holding a doctoral degree ● Tenured professors of any rank holding a doctoral degree

Note: Each supervisor may supervise a maximum of two TRSM's doctoral candidates in any given time period. The supervision of the candidate concludes at the time when the dissertation is presented and defended or if the candidate withdraws.

Faculty seeking to teach or supervise at in the PhD in Management program will go through an established application process. The Associate Dean, Graduate Programs will maintain a database of the doctoral level teaching and supervisory profile of academic staff within TRSM, including the number of courses taught and supervisions being carried by each academic staff member. See Appendix D; Faculty Qualifications and CVs. In total, 67 faculty have previous experience supervising graduate students in various capacities including MRP supervisions, MRP second readers, MRP defence committees, master's thesis supervision, master's thesis defence committees, doctoral supervision, doctoral co-supervision, doctoral committee supervision, candidacy exam participation, dissertation defence committee participation, and post-doctoral fellows.

Faculty involved in the supervision of doctoral students must balance this responsibility with their existing obligations to teaching, research and service. The Ryerson University Collective Agreement sets out the calculation of workload allocation. In accordance with the provisions of the Collective Agreement, including Article 7 and the academic responsibilities of members in Article 10, the norm is two half course equivalents in one semester and two half-course equivalents in the other semester. For the purposes of determining teaching load, graduate supervision does not count as part of the 2+2 course load and any points system for graduate supervision that existed previously was discontinued when Departments/Schools achieved a 2 + 2 teaching load.

2.g.v. Number of Faculty and Support Staff

Core faculty in the proposed program are active researchers in their fields, publishing cutting edge research in leading journals, and collaborating with, applying or creating leading research in management.

The current faculty complement is sufficient to launch the proposed PhD program, however, in addition to current succession and replacement plans, there should be attention paid to the proposed specialty areas for future positions, to ensure the responsibilities to the PhD program in its likely higher demand areas can be met. Future consideration should also be given to open rank hiring, to augment experienced faculty for PhD student advising.

Table 2.11: TRSM Faculty Count by Department

Department	LTF	Probation	Tenured	Grand Total
TRSM Accounting	3	2	10	15
TRSM Entrepreneur & Strategy	3	1	13	17
TRSM Finance		4	10	14
TRSM Global Management Studies		5	10	15
TRSM Health Services Mgmt		1	4	5
TRSM Hospital. & Tourism Mgmt		2	9	11
TRSM HR & Org Behaviour		3	9	12
TRSM Information Tech Mgmt	5	4	17	26
TRSM Law and Business	1	2	8	11
TRSM Marketing	3	2	9	14
TRSM Real Estate	1	1	4	6
TRSM Retail Management	1	1	6	8
Grand Total	**17**	**28**	**109**	**154**

A new Graduate Program Administrator (GPA) was included in the 2017/18 base budget for the current and planned increase in graduate programs and students. The position has been filled and currently works with the MScM and MHA (CC) programs. There is another GPA for the MBA programs. Given the proposed size of the PhD program, it is likely that adding a Program Assistant (OPSEU 9 level) could provide support to the Graduate Program Administrator, and the Director of the PhD in Management program.

2.g.vi. Projected Enrolment

Based on the projected enrolment of six students (full-time equivalent or FTE) per year, the program should reach 24 FTEs at steady. This would consist of full and part-time students, with the anticipated majority being full-time.

2.g.vii. Tuition

2017-2018 tuition for three semesters (one year) of doctoral studies at Ryerson University was set at $9,283.80 for all programs with the exception of the Communications and Culture program. The tuition for three semesters (one year) of doctoral studies in the Communications and Culture program, offered jointly with York University is $5,610.35.

Program tuition fees across Ontario for PhD programs in business/management range from $7,000 per year (three semesters) to $9,200.00 per year (three semesters). The average tuition for one year (three semesters) is $7,800.00.

For a detailed breakdown of program tuition and funding for PhD in Business/Management programs in Canada, please see Section 2.g.i - Table 2.4.

2.g.viii. Student Financial Assistance

TRSM encourages a research culture where faculty members engage students in research by providing physical space for graduate students, supervision of graduate research, and by promoting faculty applications for funding that include support for hiring graduate research assistants.

Base Funding

Graduate student funding support would be a multi-pronged approach that includes: internal and external fellowships and scholarships, teaching assistantships, graduate assistantships, and research stipends and assistantships. Eligible domestic students admitted to study full time would receive a minimum of $25,000 a year for up to four years composed of a combination of these sources. Incoming full-time PhD students are the top hiring priority for TA/GAs. The average annual funding at Canadian Schools is $25,538.00, ranging from $15,000-$33,000.[43] When comparing available funding with institutions in the Toronto area, average funding is closer to $30,000.00.

Research and Graduate Assistantships

Students will have access to Research Assistantships in which students will work with a principal investigator in conducting research activities not related to their studies.

"The minimum rate of pay will be defined by the Granting Council (SSHRC, NSERC or CIHR) or organization/institution which is funding the principal investigator. The minimum rate of pay at Ryerson University is defined in the OPSEU Collective Agreement, Article 14, Section 14.06. The terms of employment of graduate students will be consistent with this collective agreement. However, the minimum recommended rate of pay for graduate students is the rate at which Graduate (Teaching) Assistants are paid, which is outlined in the CUPE 3 Collective Agreement."[44]

Students will also have access to Graduate (Teaching) Assistantships, in which they will be:

"Employed to assist with teaching or related duties for a maximum of 10 hours per week. The rate of pay can be found on the Human Resources website in the CUPE Local 3904 Unit 3 Collective Agreement. Students may be offered a GA position by their program, and/or the positions will be posted on the HR

[43] Chestnut

[44] https://www.ryerson.ca/graduate/future-students/financing-your-studies/

website. The terms of employment of graduate students will be consistent with the collective agreements between Ryerson and its employee groups."[45]

Alternative Funding Sources

The need to succeed at getting grants is a continuing part of academic life at research institutions. Bringing in outside funding is critical if one is to sustain an independent research-driven career in an academic setting. Preparing grant applications is a valuable exercise, and an excellent opportunity for students to network with agency representatives.

Working with the support of faculty supervisors, TRSM research support staff and OVPRI Grant Officers, PhD students will be encouraged to secure research grants of their own. There are a number of funding packages – internal and external – available to Ted Rogers graduate students. Competitive scholarship opportunities include tri-council (Natural Sciences and Engineering Research Council (NSERC), the Canadian Institutes of Health Research (CIHR), the Social Sciences and Humanities Research Council (SSHRC), among others (e.g., Vanier, OGS).

Scholarship and Awards

PhD students face significant financial hurdles related to tuition and expenses associated with research and dissertations. PhD students conduct original research that requires dedication and long hours. As a result, undertaking paid work is often challenging for graduate students. To bridge the financial gap for doctoral students, a wide cross-section of funding sources is available in the form of scholarships and awards.

A comprehensive list of scholarships and awards can be found on the YSGS website. [46] Financial support initiatives can be general in their eligibility requirements, or specifically targeted to individual student groups.

Additionally, thanks to a generous donation from Ted and Loretta Rogers, each year the Ted Rogers School of Management issues a total of 24 Graduate Entrance Scholarships and Awards worth up to $20,000.00 each. Augmenting these would be a priority of TRSM Development staff. TRSM endowments have grown by 14% between 2011 and 2015, standing at $39.2M.

2.g.ix. Library

A review of the Library's collection of electronic resources and journals was undertaken to ensure that they are aligned with the proposed program's core curriculum, as stated in the program proposal's detailed course outlines. The Library is recommending that consideration be given to acquiring several additional electronic resources and journals to enhance support for the program. These proposed acquisitions are consistent with developing a collection to address the research needs of students enrolled in a PhD in Management program.

The Ryerson University Library report demonstrates its commitment to supporting student learning in the proposed PhD in Management. Specifically, the reports states that "a review of the course outlines accompanying the program proposal suggests that written work requiring in-depth Library research represents a significant component of many courses. Though developing collections to support this research is

[45] https://www.ryerson.ca/graduate/future-students/financing-your-studies/

[46] https://www.ryerson.ca/graduate/future-students/financing-your-studies/scholarships-awards/

critical, so too is the role librarians play in providing expert instruction and research assistance to students, particularly at the graduate level. The Library's subject liaison librarians for business currently deliver classes, workshops and one-on-one in depth research assistance to TRSM's undergraduate and graduate students. This program of instruction and assistance will be extended to include students in the proposed doctoral program."

Additionally, the report indicates "that while a core of databases relevant to several aspects of the proposed program is available at Ryerson, consideration should be given to augmenting the existing Library collection to provide needed enhanced support for research in the potential areas of program specialization reflected in the detailed course outlines that accompanied the proposal. Based on those outlines, the Library has identified several numeric and full text databases that will provide resources for independent research by students enrolled the program by ensuring access to additional sources of qualitative and quantitative data." See Appendix E for the full Library Report.

2.h. Quality and Other Indicators

2.h.i. Quality Indicator Definitions and Use

Indicator 1: Publications in Top-Tier Journals

The Australian Business Deans' Council (ABDC) Journal Quality List is used to guide faculty in identifying appropriate outlets for their work. In the 2013-2017 time period, 47% of the PRJ's were published in journals on the ABDC list and almost a quarter (23%) of all peer-reviewed journal articles (PRJs) were published in ABDC list top-tier journals (A* and A). The other PRJs (53%) were published in journals not on the ABDC List. This is not surprising due to the diversity and breadth of the intellectual expertise of TRSM faculty, which goes beyond traditional business schools. Many of our faculty publish in top-tier journals in information technology (Computers & Industrial Engineering, 2015 5-Year Impact Factor of 2.517), digital media (New Media & Society, 2015 5-Year Impact Factor of 3.957 | Cyberpsychology Behavior and Social Networking, 2015 5-Year Impact Factor of 3.246) sustainability and energy (Applied Energy 2015 5-Year Impact Factor of 4.783 | Renewable Energy 2015 5-Year Impact Factor: 4.068 | Journal of Cleaner Production, 2015 5-Year Impact Factor: 5.315), management science (OMEGA: The International Journal of Management Science, 2015 5-Year Impact Factor of 4.289), ethics and law (American Journal of Bioethics, 2015 5-Year Impact Factor of 4.943), and health science journals (PLOS ONE, 2015 5-Year Impact Factor of 3.535).

Ensuring accessibility to research findings and reflecting the multicultural communities in which students, staff, and faculty live and work is another goal to which TRSM aspires. Several faculty members have published articles in niche journals aimed at diverse audiences, such as bilingual journals and journals with an emphasis on addressing issues in particular communities and/or in certain parts of the world. This is in addition to publishing in some of the most prestigious journals in business management, including the Academy of Management Journal, International Entrepreneurship and Management Journal, MIS Quarterly, Annals of Tourism Research, Journal of Consumer Research, Journal of Business Ethics, Strategic Management Journal, and Organization Science.

Indicator 2: Award Winning Intellectual Contributions

The high quality of TRSM intellectual contributions is also recognized externally via awards for outstanding scholarly works, including best/highly commended/distinguished papers, best posters/presentations, best

paper proceedings, top-ranked grants/grant proposals, and PhD dissertation excellence awards. Table 2.12 below lists a sample of awards received by TRSM faculty members between 2013 and 2017 for exceptional scholarship.

Table 2.12: A Sample of TRSM Award Winning Intellectual Contributions

Legend: DSM = Digital Enterprise and Social Media, RES = Real Estate Studies, RCS = Retail and Consumer Services, SIE = Strategy, Innovation and Entrepreneurship

Recipient(s)	Area	Award	Awarding Body/Organization
Gunn, F., Lee, S.H.	RCS	Best Paper Award for "Profiling People's Perceptions of Retail Management Careers"	European Association for Education and Research in Commercial Distribution
Lee, S.H., Kandaurova, M.*, Sergueeva, K.*, Griffin, T., Dimanche, F., Guttentag, D., & Giberson, J.*	RCS	Best Paper Award - Tourism & Sports Management Division for "Virtual Reality Enhances Visual Comprehension and Memory of Tourism Destinations"	2017 Administrative Sciences Association of Canada Conference
Gandomi, A. & Haider, M.	RES	Article "Beyond the Hype: Big Data Concepts, Methods, and Analytics" Ranked 1st Among the "Most Downloaded Articles" of the Journal (April 2015 to December 2016)	International Journal of Information Management – Elsevier
Gibbs, C. & MacKay, K.	RCS	2016 Highly Commended Paper Award for "Social Media Usage in Hotel Human Resources: Recruitment, Hiring and Communication"	International Journal of Contemporary Hospitality Management, Emerald Literati Network
Lee, S.H.	RCS	2016 Best Article of the Year Award for "Learning Beyond Negotiation Tactics: The Sales Marketplace"	Journal of Advancement of Marketing Education
Lee, S.H.	RCS	2016 Best Paper Award - Tourism & Sport Management Division for "Forgiving Sports Celebrities with Ethical Transgressions: Parasocial Relationships and Regulatory Focus Orientation"	2016 Administrative Sciences Association of Canada Conference

Malhotra, S. & Sui S.	SIE	Best Paper Proceedings Award for "The Influence of Entry Density on the Survivability of SMEs in International Markets"	2015 Annual Meeting of the Academy of Management
Dodds, R.	RCS	Best Paper Award for "Sustainable Tourism Using a Watershed Management Approach"	2015 Advances in Hospitality and Tourism Marketing and Management Conference
Gruzd, A.	DSM	Best Paper Award for "Politically Polarized Online Groups and their Social Structures formed around the 2013-2014 crisis in Ukraine"	2014 The Internet, Policy & Politics Conference, University of Oxford
Scofield, D.	RES	2014 Highly Commended Paper Award for "Broker Use and the Price of Liquidity in Commercial Real Estate Investment" in the Journal of European Real Estate Research	Emerald Publishing
Lee, S.H.	RCS	2014 Best Paper Award for "A CIT Investigation of Disruptive Student Behaviors: The Students' Perspective" in Marketing Education Review	Marketing Education Review

*TRSM student

Indicator 3: Scholars Recognized for Contributions to Theory and Scholarship

Many TRSM faculty members have been recognized by external bodies and organizations for their impact on and contributions to furthering academic scholarship. In the 2013-17 time period, TRSM faculty have received awards and honours for outstanding reviewing activities and their overall influence and contributions to a field of study. Table 2.13 below lists awards and honours received by TRSM faculty recognizing their impact on theory and scholarship.

Table 2.13: Awards and Honours Recognizing Impact of TRSM Researchers on Theory and Scholarship

Recipient(s)	Area	Type of Award/Honour	Award/Honour	Awarding Body/Organization
Cukier, W.	SIE	Honouring Research Accomplishments	2017 Social Innovation and Action Research Award	Ryerson University
Fels, D.	DSM	Research Award (Nomination)	Named Finalist for a 2017 SSHRC Insight Award	Social Sciences and Humanities Research Council
Gruzd, A.	DSM	Honouring Research Accomplishments	2017 Collaborative Research Award	Ryerson University
Gruzd, A.	DSM	Honouring Research Accomplishments	Named as a Member of the College of New	Royal Society of Canada

			Scholars, Artists and Scientists (2017)	
Dimanche, F.	RCS	Recognizing Research Accomplishments	Listed in Top 0.5% of Researchers by 30-Day Views (April-May 2016)	Academia.edu
Farrar, J.	RES	Fellowship	Named Associate Research Fellow	Tax Administration Research Centre, University of Exeter
Farrar, J.	RES	Fellowship	Named Doctoral Fellow	CPA Ontario
Gruzd, A.	DSM	Research Award	Named Canada Research Chair (Tier II) in Social Media Data Stewardship	Canada Research Chairs
Gruzd, A.	DSM	Fellowship	Named Ontario/Baden-Württemberg Faculty Research Fellow	Ontario Universities International
Ngwenyama, O.	DSM, SIE	Fellowship	Appointed Professorial Research Fellow in the Department of Information Systems and Business Analytics	Faculty of Business and Law – Deakin University (Australia)
Ngwenyama, O.	DSM, SIE	Visiting Scholar	Appointed Visiting Professor	Institut d'Economie et Management de Nantes –Université de Nantes (France).
Ngwenyama, O.	DSM, SIE	Honouring Research Accomplishments	Inducted as a Member	Academy of Science of South Africa
Ngwenyama, O.	DSM, SIE	Recognizing Research Accomplishments	Named One of the Top 100 Information Systems Researchers (1990-2015)	Association for Information Systems (AIS)
Fels, D.	DSM	Honouring Research Accomplishments	2015 Collaborative Research Award	Ryerson University
Sui, S.	SIE	Best Reviewer Award – Journal	Best Reviewer Award, Strategic Management and International Business Area (2015)	Canadian Journal of Administrative Sciences

Lee, S.H.	RCS	Best Reviewer Award – Journal	Best Reviewer of the Year Award (2015)	Marketing Education Review
Middleton, C.	DSM	Honouring Research Accomplishments	Named to the Royal Society of Canada College of New Scholars, Artists and Scientists (2014)	Royal Society of Canada
Dimanche, F.	RCS	Fellowship	Elected a Fellow of the International Academy for the Study of Tourism (2013)	International Academy for the Study of Tourism
Fels, D.	DSM	Honouring Research Accomplishments	Margaret R. Pfanstiehl Memorial Achievement Award for Research Contributions and Development in Audio Description (2013)	American Council of the Blind

Indicator 4: Impact on Theory and Scholarship Through Service

TRSM faculty members also influence theory and scholarship through their roles in scholarly organizations. Table 2.14 below lists the organizations for which TRSM faculty members have served through leadership roles, editorial activities, and as members of advisory boards and on boards of directors.

Table 2.14: Sample of Editorial Activities and Significant Roles in Scholarly Organizations

Type	Organization
Editorships & Co-Editorships (Peer-Reviewed Journals and Academic Conferences)	AIS Transactions on Human-Computer Interaction ALSB Journal of Employment and Labor Law Association for Information Systems Big Data & Society Journal Business Ethics Journal Review European Conference on Information Systems European Journal of Information Systems Global Journal of Business and Economics Global Science & Technology Forum - Journal of Business Review Human Behavior and IS track - International Conference on Information Systems Decision Analytics and Support track - International Conference on Information Systems

	International Journal of Information Systems and Change Management IT Implementation, Adoption, and Use track - International Conference on Information Systems Journal of Business Ethics Journal of Small Business and Entrepreneurship Journal of Sustainable Tourism Journal of Tourism Challenges and Trends Journal of Tourism Futures Networked Influence - American Behavioral Scientist Online Communities for Information, Communication & Society Social Media Research and Analytics track - European Conference on Information Systems Special Issue on Human-Computer Interaction in the Web 2.0 Era - AIS Transactions on Human-Computer Interaction Technology and Disabilities Teoros Special Edition: Innovations in Sustainable Tourism Tourism Analysis: An Interdisciplinary Journal
Editorial Board Memberships (Peer-Reviewed Journals and Academic Conferences)	ARA Journal of Travel Research Athens Institute for Education and Research Contemporary Accounting Research Electronic Journal of Knowledge Management EUMMAS 2014 International Conference on Marketing, Management and Economics European Retail Research i-Manager's Journal on Management International Journal of Applied Geospatial Research International Journal of Business Environment International Journal of Contemporary Hospitality Management International Journal of Hospitality & Tourism Administration International Journal of Hospitality and Event Management International Journal of Sport Marketing and Sponsorship International Sport Facility and Event Management Journal Journal of Business Research Journal of African Business Journal of Business Ethics Journal of Place Management and Development Journal of Travel Research Journal Recent Patents on Computer Science Papers in Applied Geography SMEDA Research Journal Strategic Management Journal Sustainability Journal

	Teoros Journal The Shield: International Research Journal of Physical Education and Sports Science
Leadership Roles	Association of Information Systems Special Interest Group on Decision Support and Analytics Association of Internet Researchers International Congress on Environmental Modelling and Software Journal Review Foundation of the Americas Travel & Tourism Research Association Canada Travel and Tourism Research Association Europe
Membership on Boards of Directors	CANARIE (Canada's Advanced Research and Education Network) Consortium for Aerospace Research and Innovation in Canada Iranian Scholars Worldwide Japan Studies Association of Canada Travel & Tourism Research Association Travel and Tourism Research Association Europe
Membership on Advisory Boards	1st Biannual Forum - Advances in Destination Management Business Ethics Journal Review Business Specialty Group, American Association of Geographers Canadian Business Ethics Research Network Canadian Journal of Non-profit and Social Economy Research Centre for Outsourcing Research and Education (CORE) Equity Policy of the Canada Research Chairs Program International Journal of Contemporary Hospitality Management Journal of Information Policy Journal of Information Technology Journal of Natural Resources and Development Journal of Non-profit and Public Sector Marketing Sports Marketing and Management Conference Strategic Outsourcing, International Journal Summer Research Institute, Consortium for the Science of Socio-Technical Systems Tourism Review International

Indicator 5: Impact on Practice Through Service

The impact of TRSM faculty on practice is demonstrated by faculty service roles in industry, government, and community organizations. The significant roles listed in Table 2.15 below testify to the influence of TRSM faculty on practice in various fields and sectors. Their contributions have resulted in enhanced decision-making and in the implementation of strategies capable of improving quality of life and achieving economic, social, and environmental goals at the local, national, and international level.

Table 2.15: Significant Roles in Industry, Government, and Community Organizations

Role	Organization
Advisory Roles & Membership on Advisory Boards, Boards of Trustees, and Boards of Directors	Big Brothers and Sisters Canada Oriental Culinary Society Canadian Association of Fairs and Exhibitions Canadian Entrepreneurship & Innovation Platform Crossbar Group (Diversity & Inclusion Study) Environics Institute Flybits, ICT startup Guelph Community Sports The Icarus Foundation International Data Corporation Ontario Ministry of Community and Social Services Municipal Property Assessment Corporation of Ontario NEST Network Board of Directors NPower Canada Regional Advisory Board Online Revealed Canada Ontario Government Changing Workplaces Review Social Policy Advisory Council (Government of Ontario) St Joseph's Rehabilitation Corporation The Responsible Gambling Council of Ontario Toronto International Film Festival United Nations Global Compact (ISO 26000 Social Responsibility Standard) Women's College Hospital Board of Directors
Membership on Committees and Task Forces	American Collegiate Retailing Association Baycrest Health FIPPA Committee Baycrest Health Privacy Committee Brazil-Canada ICT Working Group Canadian Association of Chiefs of Police, Quality Assurance Committee Canadian Committee for International Standard ISO 37500 Canadian Industrial Relations Association (CIRA) CFA Award of Excellence Committee, Canadian Franchise Association Complaints Committee Society of Management Accountants of Ontario CSR Centre of Excellence for Extractive Sector Diversity Forum, Toronto Board of Trade Ecobiz Tourism Commission, Nice French Riviera Chamber of Commerce Equity & Community Advisory Committee, Women's College Hospital Greening Events Committee, The Icarus Foundation, Canada Canadian Retail Group Committee, International Council of Shopping Centres International Women's Forum Laser Safety in Health Care Facilities for CSA Standard Z386, Technical Committee

	North American Research Taskforce, International Council of Shopping Centres PRIDES (Pôle Régional d'Innovation et de Développement Economique Solidaire), Tourisme d'Affaires et de Congrès Research Advisory Committee, Real Property Association of Canada Rules Committee, Ontario Court of Justice Services Advisory Board, Statistics Canada Sustainable Canada Dialogues Initiative (Ontario) Telecom Valley M-tourism Commission Toronto Community and Cultural Centre Toronto Region Immigrant Employment Council Advisory Council Transportation Options (Canada) Women's College Hospital Foundation Women's College Hospital, Quality Assurance Committee

2.h.ii. Intellectual Quality of Student Experience

The overarching goal of this PhD in Management program is to provide an outstanding educational experience for TRSM graduate students from enquiry to graduation and beyond.

PhD study is characterized by increased student autonomy, higher academic demands, closer relationships with faculty, and potentially exciting and rewarding outcomes for both faculty and students. The overall goal is to achieve the timely completion of an excellent degree for every student.

Student Learning Support

For graduate students with specific concerns about their academic skills and the demands of graduate-level study, the Ryerson Student Learning Support Centre (SLS) programming will help candidates to further develop these skills under the guidance of staff.

Programming includes graduate writing groups, dissertation retreats, dissertation coaching, graduate research and writing institutes and tailored workshops.

The SLS offers a variety of free support programs designed to help students improve and develop their communication skills – help with writing, speaking, listening, and reading. This also becomes an opportunity to meet fellow students and practice language skills in a friendly, stress-free environment. Students may book individual appointments with an English language facilitator or take part in Group sessions that aim to improve oral fluency and interpersonal communication skills through group discussions, real-life tasks and presentations.

Yeates School of Graduate Studies Support

The Yeates School of Graduate Studies (YSGS) is another resource for graduate students seeking help with many aspects of graduate student life, including funding applications, writing and editing, and navigating the job search process.

Instruction, information and research-skills support currently available to graduate students include regular or occasional workshops such as Navigating the Library Resources; Grad Talks, and Dissertation and Exam support to name a few. YSGS provides a student orientation program for graduate students in the Fall of each year and also provides ongoing information and support through a variety of programs such as online professional development workshops and the Three Minute Thesis competition.
Locate current workshop schedule at: http://library.ryerson.ca/info/whats-new/workshops-and-events/, and workshops for graduate students at: http://library.ryerson.ca/services/grads/gworkshops/

Assistance with Funding/Grants

To assist candidates to fund their research through grants and scholarships, there are also presentations provided by YSGS and TRSM to explain the expectations of the various funding bodies.

It is understood that a strong PhD program must be supported by substantial resources in the form of funding, support services and skills development opportunities. We have made significant efforts in this regard since 2011. Financial support is provided to assist faculty members at various stages of the research process. An annual competition is held for up to 15 Internal Development Grants ($7,000) to launch new projects or lines of research. Research presentations at peer-reviewed conferences are facilitated by the SRC Travel Grant ($2,000), available to faculty members upon application. TRSM also has financial assistance programs for registration costs associated with attending a conference within the Greater Toronto Area ($250), graduate student conference attendance, and journal publication/submission fees to ensure that professors are able to publish their work in the most appropriate publications. Newly admitted PhD candidates will be eligible to apply for such resources directly or in collaboration with their supervisor.

Ryerson University offers world class training to our students through experiential learning and research opportunities. The Office of the Vice –President Research and Innovation are committed to building capacity in our students, imparting the skills necessary for them to become the next generation of highly qualified personnel.[47] The OVPRI website provides links to a large number of funding programs including OCE TalentEdge, Mitacs, and the Ryerson International Conference and research Support fund to name a few.

Government-funded programs such as MITACS are playing a key role in connecting student researchers with initiatives in business and industry through internships (Accelerate), and providing skills training (STEP and NTT) and postdoctoral opportunities (Elevate). We will promote these opportunities to PhD candidates and identify any barriers to their involvement.

Faculty Support

Many faculty members have been identified with the academic background and expertise to be able to provide the necessary guidance and leadership to make the proposed program a success. TRSM encourages a research culture where faculty members engage students in research by providing physical space for graduate students, supervision of graduate research, and by promoting faculty applications for funding that include support for hiring graduate research assistants.

Upon entry to the program, a supervisor will be assigned to each PhD in Management student. The supervisor will serve as a guide and mentor to the student, assisting them in navigating choice of courses, dissertation topic, research approach and method, and other research related activities. In consultation with the student, a Supervisory Committee will be formed. The committee will provide guidance to the student and assess their progress through the program, from the articulation of research intention to the completion of their thesis.

[47] https://www.ryerson.ca/research/students/

Committee members will provide feedback and guidance to the student to ensure they can be complete the program successfully.

Faculty in the program will ensure the intellectual quality of the student experience in the following ways:

- Foundation seminars modules will be taught by a range of faculty, ensuring their interaction with students and the transmission of a wide range of expertise
- A student's supervisor will support the student's progress through the program through regular meetings, including an annual committee meeting, meetings to discuss preparation for the candidacy exam and regular dissertation meetings
- Faculty in the program maintain impressive publication, performance and research-creation records, ensuring not only that students are taught by experts working at the leading edges of their fields but also that the problem-based approach of the program remains focused on current and emerging issues
- Faculty in the program will engage students as research assistants, co-publishers, co-researchers, and collaborators on a variety of projects according to their interests and expertise. This will ensure that junior scholars are provided with support and mentorship in learning the processes involved with preparing and disseminating intellectual and artistic work.

To further develop a culture of research, resources to support faculty are essential. We have made significant financial investments in workshops, seminars, and personnel to inform research practices, grant writing, and knowledge mobilization. In 2015, a Research Mentors program was initiated to offer expertise and support to researchers relevant to varying career stages. Research Mentors provide leadership in cultivating research skills by hosting seminars and workshops (e.g., writing retreats, methodology workshops, etc.) to foster research excellence.

Career Support Services

One of the changes facing doctoral students today is the change in career opportunities available to doctorate holders. Traditionally, the doctorate was seen as the entrance qualification for an academic career. Today, however, doctoral graduates are employed across all sectors, often in research and/or management roles. Despite this, both doctoral students' and supervisors' understanding of this new career landscape is often poor, and can lead to misinformed expectations, disappointment and loss of opportunities. [48]

Research Centres and Institutes

TRSM is home to 15 research centres/institutes. These centres provide important connections to industry and community partners and produce an extraordinary number of research contributions ranging from peer-reviewed publications and industry reports to international conferences with world renowned speakers. They contribute to the reputation of TRSM and the credibility of our work in industry and academic circles in several strategic areas important to TRSM's mission. These centres have collectively hosted over 1000 events in the past five years and are routinely open to undergraduate and graduate students. TRSM research institutes are critical for knowledge transfer, enhancing research skills of students and faculty, and networking

[48] https://www.universityaffairs.ca/career-advice/beyond-the-professoriate/does-a-phd-actually-make-a-difference-in-a-non-academic-work-environment/

locally and globally. TRSM must continue to broaden our international relations and deepen them to include comprehensive research and student education partnerships.

Centre for the Study of Commercial Activity (CSCA)

The Centre links the activities of a university-based research unit with the needs of a broad set of private and public sector members. The concept has been to build, maintain and develop extensive databases that enable CSCA researchers to establish a detailed understanding of the changing nature of the supply-side of the Canadian consumer service sector.

The research activity of the Centre has been supported by industry membership, the Eaton Chair endowment, grants from provincial and national funding agencies and University support. The underlying research model is based on a 'mutual fund' approach whereby the Centre seeks and benefits from the support of a range of stakeholders, and in turn, members of the CSCA benefit from the Centre's insights and data. Promoting partnerships between the private and public sector has been a key component of the success of the CSCA.

At Ryerson there are a number of departments with their teaching and research programs that link to the CSCA research mandate. The Centre works with various programs with regard to student training, career opportunities, thesis supervisions or partnership research activities.

Entrepreneurship Research Institute

The Entrepreneurship Research Institute was founded in 2008 with a mandate to encourage and support research that improves our understanding of the fundamental questions of entrepreneurship. Membership is open to any researcher at Ryerson University who is interested in the phenomenon of entrepreneurship and how it contributes to social well-being and national development.

The ERI is devoted to investigating the role that entrepreneurs play in modern economies. In keeping with the reputation of Ryerson University and the Ted Rogers School of Management, ERI focuses on research of high academic and intellectual value, with clear applicability to practitioners in the business community. ERI also delivers periodic seminars and symposia on topics of interest to scholars of entrepreneurship.

Institute of Innovation and Technology Management

The strategic mission of the Institute for Innovation and Technology Management (IITM) is to find innovative solutions to real-world technology management problems. We understand that these problems are interdisciplinary and, as such, any solution must go beyond traditional views of organization and technology.

Major research collaborations include:

- OSAP, Social Media and Perceptions of Postsecondary Education Affordability
- Accelerating Digital Technology Adoption in Canadian Companies (ADOPT-IT)
- Connected Workplace: The Transformation of Work in Canada
- Information Technology Management and Organizational Learning
- Dynamic Design Capabilities
- Information Technologies and Economic Growth

The Institute has cultivated national and international relationships with other post-secondary institutions and is proud of its extensive links with experts from a variety fields.

Social Media Lab

The Social Media Lab is an interdisciplinary research laboratory. The lab studies how social media is changing the ways in which people and organizations communicate, disseminate information, conduct business and form communities, and how these changes impact the social, economic and political structures of modern society.

Expertise lies in studying online communities and social networks and developing new methods for analyzing and visualizing social media data. The broad aim is to provide decision makers with insights into the behaviors of online network members, and to understand how these interpersonal connections influence our choices and actions.

The lab is comprised of international, multi- and interdisciplinary team of faculty and student research collaborators are spread across the globe. Our expertise lies in studying online communities and social networks and developing new tools and methods for analyzing and visualizing social media data. The research foci includes Online Communities, Social Media Data Stewardship, Online Social Networks, Social Networks Analysis, Information Visualization and Computer-Mediated Communication

Diversity Institute

The Diversity Institute uses an ecological systems approach to understand diversity and inclusion at the societal, organizational and individual levels. We also leverage technological and social innovation to address both long-standing and emerging societal challenges. We deploy policy and media analysis to examine nuanced aspects of workforce integration, and undertake advocacy to government for evidence-based public policy measures based on our research.

Using an ecological model of change, the Diversity Institute is driving innovation across sectors. Workplaces do not operate in a vacuum: broad social and cultural factors influence external perceptions of an organization and have a profound impact on procuring the talent necessary to succeed.

The ecological model provides a framework for organizations to consider the complex interactions and barriers among individual, organizational and societal factors. A thorough understanding of the linkages between the societal, organizational and individual levels ensures that organizations support practices that positively shape systemic processes.

Inclusive Media and Design Centre

Established in 1994, the Inclusive Media and Design Centre designs, creates, and evaluates inclusive media and technology. Projects focus on inclusivity in technologies for the blind and low-vision and deaf and hard of hearing individuals.

Teaching and Learning Support

Graduate students as TAs are key contributors to the learning environment at TRSM. For this Ryerson University provides appropriate training to develop the necessary teaching skills both for professional development and to maintain the quality of teaching. The Learning and Teaching Office (LTO) is a leader in learning and teaching at Ryerson. As the primary support for the teaching community at Ryerson, the LTO fosters a culture of excellence and innovation in teaching, working to continually enhance student learning across the university.

The LTO offers faculty-specific Teaching Assistants/Grading Assistants (TA/GA) orientations at the beginning of the Fall semester and a university-wide orientation at the beginning of the Winter semester. The orientations

are designed to help prepare new TAs and GAs for their first day of class. The university-wide option is open to all TA/GAs. Individuals working in TRSM register for a customized unique session.

True to our mission, TRSM focuses on student development and career ready education and that means emphasizing practical solutions to real-world problems and situations. In this regard, Teaching/Graduate Assistants (TA/GA) play a distinct role. At TRSM, TA/GA supplement, rather than replace faculty instruction. TA/GA lead tutorials, labs and discussion groups providing students with the opportunity to engage actively with the lecture material as they work alongside their peers. Ryerson's Learning and Teaching Office, in conjunction with TRSM, provides opportunities for TA/GA to become more effective in their work at TRSM and to mentor others through a comprehensive three-level certification program.

The LTO provides a collection of resources and programs for PhD students that assist in developing the skills and attributes necessary for a successful academic career. With specific topics in teaching, course design, engaging students, classroom management, professional development, writing, and public speaking and presenting, the resources available gives students the opportunity to learn and develop skills that will serve them in the course of their doctoral education as well as in their careers to follow.

Although most studies show a decline in the number of doctoral students desiring an academic career as their program progresses, there does not appear to be a corresponding increase in knowledge about the variety of alternatives available to them. This indicates a need, from registration onwards, for more robust and tailored careers advice and support for doctoral students to help them take advantage of exciting potential career paths.

Students at TRSM receive more individualized and extensive career services than most graduate programs. The TRSM Business Career Hub and Graduate Career Services Office are the vital links between the business community and TRSM in providing employability skills development and job opportunities for all students within the faculty; to deliver valuable career counselling; to enhance job search skills through career development services; and to provide employers with skilled workers well prepared to contribute to their organization. The services focus on providing students the tools for successful career self-management and enabling the development of the employability skills necessary to achieve career goals.

APPENDICES INCLUDED IN PROPOSAL

Appendix A. Comparator School Market Scan and SWOT
Appendix B. Course Outlines
Appendix C. Letters of Support and Authorization Letter
Appendix D. Faculty Qualifications and CVs
Appendix E. Library Report
Appendix F. Graduate Degree Level Expectations Table and Curriculum Map

Review of the PhD in Management Program at the Ted Rogers School of Management, Ryerson University

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1. Outline of the Review

The site visit took place on May 22 and 23, 2019. During the visit, the peer review team met with various representatives from Ryerson University, including the Dean of the Yates School of Graduate Studies (YSGS), Dean of the Ted Rogers School of Management (TRSM), Associate Deans from the TRSM, the Director of Strategic Initiatives and Accreditations, members of the PhD Curriculum Development Committee, faculty members from the proposed specialization, current MScM students in the TRSM, staff from the Graduate Programs Office, faculty members who served as second readers of the PhD in Management proposal, and the Provost and Vice-President, Academic of Ryerson University. In addition, the review team toured the Student Learning Centre and the Library with staff from the TRSM and the Library. The review team was also provided with time to meet alone to discuss issues and begin drafting the report.

A copy of the agenda with further details of the meetings is provided as an Appendix.

2. Evaluation

2.1. Objectives

Ryerson's mission and academic plan is to create programs relevant to changing careers, professions, and scholarly disciplines. Since the proposed Ph.D. program is based on existing strengths of the faculty, it would enhance partnerships with industry, government, and professional practice through various research and innovation activities. Hence, the proposed program is aligned with the institution's mission and academic plans.

The learning outcomes are aligned with Ryerson University's Graduate Degree Level Expectations (GDLEs).

Based on the goal and objectives of the program, the proposed nomenclature is appropriate.

2.2 Admission requirements

Admission criteria listed in Section 2.b.ii of the proposal are generally aligned with the learning outcomes listed in Section 2.a.ii. However two items need further attention.

First, there is currently no specified minimum GMAT score. Requiring a minimum GMAT would: (i) provide assurance of the quality of the incoming students; and (ii) weed out weak applications. Potential target minimums are: (i) 550 - to be consistent with minimum requirements for the MBA; or (ii) 600 - to distinguish the PhD as requiring a clearly higher minimum than the MBA. Also, the exemptions from writing the GMAT should be clearly stated (e.g., considerable relevant work experience). This will also help communicate a high admission standard and help maintain or even enhance the quality of the program in the long run.

Second, in the statement of intent and interview, applicants must express interest in developing original knowledge and disseminating research results to advance scholarship and knowledge transfer (L05.c, p.39).

2.3 Structure

The program has four main components including graduate coursework, research seminars, candidacy examination, and dissertation.

This structure is consistent with the learning objectives of the program, and with other doctoral programs in management in Canada.

The timelines provided on Tables 1.2 (full-time) and 1.3 (part-time) are appropriate in light of the structure currently proposed for the program.

2.4 Program curriculum and content

The program includes four specializations that appear to be well aligned with the university strategic mandate agreement (SMA) and the research interests and expertise of the faculty.

However, we noted several limitations with the proposed curriculum. First, the program appears to be light on course requirements. The number of courses should be more consistent with existing programs in Canada, as indicated on Table 2.5, which includes the number of required rather than total courses in each regular program. Also, the three proposed research seminars do not appear to be equivalent to regular courses as considered in other institutions. Thus, we suggest increasing the total number of courses (which may include required and a minimum number of electives) in the curriculum. For

example, the first two years in the program (full-time format) could be mostly dedicated to work in 12 courses. Required and elective courses can be selected from the list “Methodological graduate courses at TRSM” rather than from the “Methodological graduate courses at Ryerson,” as this would provide more control over what courses can be offered to the Ph.D. students at TRSM. If necessary, depending on the topic of the research and availability of the course from the list “Methodological graduate courses at Ryerson”, a Ph.D. thesis supervisor can suggest a Ph.D. student to courses from specific courses from the list “Methodological graduate courses at Ryerson.”

Several alternatives can be considered regarding the content of both existing and additional courses. We agree with “Respondent C” in the document “Authorization form and summary of responses” that the proposed quantitative methods course fails to include several tools and techniques that can be fundamental for research in many (if not all) of the program specializations. That includes content in econometrics, analytics, modeling, and simulation, among other quantitative tools. Should the school disregard the previous recommendation and maintain the current course load, this alternative can be implemented by requiring students to take a minimum of two elective methods courses in the first year rather than the currently proposed quantitative (statistics) and qualitative methods courses.

Curriculum expansion should also include a course on Philosophy of Science/Theory Development to enable students to explore ontological and epistemological foundations of research activity.

There should be an effort to offer specialization courses regularly (rather than as directed studies) according to demand. This can be accomplished by: (i) reducing the minimum number of student registrations to offer a regular course from five to three; and (ii) targeting admissions to admit at least three students in the same specialization each year.

PhD students are required to complete a dissertation consisting of independent research. This is a standard deliverable for PhD programs in management and is appropriate.

All courses taken by students in the PhD program must be graduate courses.

2.5 Mode of delivery

The course requirements of the program are to be delivered by a combination of traditional in-class courses and directed studies courses. This is appropriate as the in-class courses provide the opportunity for students to learn from others in a group setting, while the directed studies allow students to focus on specific topics relevant to their planned research. However, there should be careful attention to the appropriate balance between these two modes of delivery. Specifically, most courses should be delivered in a traditional in-class format to ensure consistency with other courses in the program and opportunities for student interaction and discussion.

Part-time students may come from industries and the focus of their research activities might be related to the problems they face in their industries. Such students’ research must be

able to meet rigorous quality required to be publishable. In some cases, an industry may not want to publish the research, which uses real data. Such issues must be addressed to meet the “Graduate Degree Level Expectations”.

2.6 Assessment of teaching and learning

The expectations for full-time and part-time students are identical (“based on the novelty, merit, and publishability of the work” (page 59)).

Final Ph.D. dissertation must also be evaluated by the internal (to Ryerson University) and external examiners. This is consistent with PhD programs in other Canadian universities.

2.7 Resources

Facilities at TRSM, including resources from Ryerson Library, are appropriate to support the proposed Ph.D. program. The Library has assessed the materials needed to support the proposed PhD program and indicated additional resources of approximately $130,000 per year that need to be acquired. It is unclear whether the University has committed to providing the additional budget for these acquisitions.

Program website must indicate that the part-time students are not funded.

2.8 Faculty

The TRSM has a large body of faculty with adequate expertise in all four proposed PhD specializations: (a) Digital Enterprise and Social Media; (b) Real Estate Studies; (c) Retail and Consumer Services; and (d) Strategy, Innovation and Entrepreneurship. As indicated in Section 2.g.iii of the proposal, there has been a significant increase in journal publications and research funding over the last decade.

The review team considered whether additional criteria (beyond the requirements for membership in YSGS) should be required to supervise PhD students. In particular, supervisory potential for the program can be assessed based on:

- Quality, quantity, and recency of publications;
- Success in obtaining external research grants; and
- Involvement in supervising/co-supervising Ph.D. students in other programs within Ryerson or outside of Ryerson.

2.9 Quality and other indicators

There are numerous faculty members in the areas of proposed specializations who have external research funding (Tri-Council, other sources). In addition, there are a number of research centres that provide evidence of high quality research activities that can support the PhD program.

3. Other Issues and Comments

Even though the subject was covered in at least two meetings, it was still not clear to the review committee how much and in what circumstances the planned financial support to students (about $25,000 per year, for four years) could be obtained. Faculty and staff indicated a range of available options, including scholarships, grants, and teaching. However, there is no clear indication in the proposal of the extent (i.e., budget) to which these items will be available, and the criteria for their award/disbursement. We strongly encourage TRSM to articulate the various funding sources, the amounts available per student and overall by the school, application and award criteria, and (in the case of grants) what expenses are allowed.

In addition, TRSM should establish and communicate clear requirements for PhD students to teach during their program. For example “students should teach at least two courses as part of their training in the PhD program.”

4. Recommendations: Internal Action

1. Focus on one or two specializations for the initial intake to build a minimum-sized “cohort” of students in each specialization ($n \geq 3$) and allow the offering of the respective specialization courses.
2. Develop clearer admission criteria:
    - Require a GMAT/GRE minimum score (with limited and clearly specified exceptions).
    - During student interviews, search for explicit evidence of an applicant’s interest to develop and publish research that is original, high in quality, and relevant for the specialization field.
    - Develop an “interview guide” to better coordinate with and support potential supervisors as they interview student candidates. The guide should indicate what minimum aspects and criteria should be explored in the interviews.
3. Revise course requirements
    - All students should be required to take an additional research methods course. The specific additional course can vary between specializations, depending on the need.
    - Consider offering a course on Philosophy of Science and/or Theory Development in the first year for all specializations.
4. Develop clear processes for managing student funding including scholarships, grants and other awards.Ensure the PhD program website makes clear that part-time students are not funded.
5. Develop a process to handle issues with PhD students (e.g., switching Ph.D. thesis supervisor).
6. Develop guidelines for writing two different types of PhD thesis (monograph versus manuscript-based).

Recommendations: External Action

1. Acquire additional library electronic resources and journal subscriptions as indicated in Appendices 3 and 4 of the “Library Response” document. In particular, we recommend subscribing to the *Business Source Complete* database and to the *Marketing Science* journal (if this is not included in the new database).
2. Develop a proposal to introduce a *Doctor of Business Administration* program for students looking at careers in business management rather than in public/private research or academia.
3. Offer Directed Reading courses in lieu of elective (or any other course) only when there are fewer than three (rather than five) students enrolled.

APPENDIX

Peer Review Team Visit PhD in Management Ted Rogers School of Management – Ryerson University				
Wednesday, May 22, 2019 – Peer Review Visit Agenda – Day 1				
Meeting Time	**Meeting Topic**	**Meeting Purpose**	**Participants**	**Meeting Notes**
8:45	Peer Review Team (PRT) Hotel Pick Up	Cindy Dunne will meet PRT in lobby of the Sheraton Hotel and accompany to first meeting at the Ted Rogers School of Management (TRSM).	· Dr. M.W. Mohamed Ismail, Professor and Associate Chair, Industrial Engineering Ryerson University · Dr. Jeffrey Parsons University Research Professor, Information Systems Memorial University · Dr. Giovani Caetano da Silveira, Professor and Chair, Operations Management University of Calgary · Ms. Cindy Dunne	Sheraton Hotel 123 Queen Street West Toronto, ON 416-361-1000 Ted Rogers School of Management (TRSM) 55 Dundas Street West Toronto, ON, M5G 2C5 416-979-5000 ext 5119 Cindy Dunne Mobile: 289-442-7599

			Director, Strategic Initiatives and Accreditations (TRSM)	
9:00 – 10:00	Overview Meeting	Review of appraisal process and program brief.	· Peer Review Team · Dr. Cory Searcy Interim Vice-provost and Dean, Yeates School of Graduate Studies (YSGS) Ryerson University · Dr. Daphne Taras Dean, TRSM · Dr. Hong Yu Associate Dean, Graduate Programs (TRSM) · Dr. Ozgur Turetken Associate Dean, Research (TRSM) · Ms. Nicole Duccomun Director, Graduate Program Administration (TRSM) · Ms. Cindy Dunne Director, Strategic Initiatives and	Dr. Ozgur Turetken is a tentative participant. Location: Dean's Boardroom 3-006

			Accreditations (TRSM) · Mr. Ben Samms Decision Support Analyst (TRSM)	
10:15 – 10:45	Meeting with Associate Dean, Graduate Programs, Director, Graduate Program Administration and support staff.	Review of program and questions from documents provided.	· Peer Review Team · Dr. Hong Yu Associate Dean, Graduate Programs (TRSM) · Ms. Nicole Duccomun Director, Graduate Program Administration (TRSM) · Ms. Cindy Dunne Director, Strategic Initiatives and Accreditations (TRSM) · Mr. Ben Samms Decision Support Analyst (TRSM) · Mr. Nik Ashton Research Support Specialist	Location: Dean's Boardroom 3-006

11:00 – 11:30	Tour of Student Learning Centre		· Peer Review Team · Ms. Anna Shevchenko Graduate Program Administrator (TRSM) · Ms. Carol Shepstone Chief Librarian, Ryerson University · Ms. Nazia Sheikh Subject Librarian, Ryerson University	Anna Shevchenko to escort Peer Review Team to Student Learning Centre for tour. Location: Meet at SLC Information Desk
11:45 – 12:15	Library Visit		· Peer Review Team · Ms. Anna Shevchenko Graduate Program Administrator (TRSM) · Ms. Carol Shepstone Chief Librarian, Ryerson University · Ms. Nazia Sheikh Subject Librarian, Ryerson University	Anna Shevchenko to escort Peer Review Team to Library.

12:30 – 2:00	Lunch with faculty representatives from proposed specializations.	This meeting is to be attended by representatives involved in the creation of proposals for the proposed specializations.	· Peer Review Team · Dr. Daphne Taras Dean, TRSM · Dr. Hong Yu Associate Dean, Graduate Programs (TRSM) · Dr. Ken Grant Professor, Entrepreneurship and Strategy (TRSM) · Dr. Anatoliy Gruzd Associate Professor and Canada Research Chair, Information Technology Management (TRSM) · Dr. Murtaza Haider Associate Professor, Real Estate Management (TRSM)	Anna Shevchenko to escort Peer Review Team to Joey's immediately following Library visit. Location: Joey's Restaurant CF Toronto Eaton Centre Toronto, ON (647) 352-5639 Reservation under: Ted Rogers

2:15 -3:00	Meeting with Current TRSM, Master of Science in Management (MScM) Graduate Students	This meeting is to be attended by students and Peer Review Team only. Opportunity for Peer Review Team to ask questions of current students.	· Peer Review Team · Current MScM Students (TRSM)	Location: Four Season's Boardroom 3-164
3:00 – 5:00	Free time for Peer Review Team	Dean(s) and/or members of the Graduate Program will be available to meet with reviewers if requested. Peer Review Team members will be provided with a quiet space to meet.	· Peer Review Team	Location: Four Season's Boardroom 3-164
5:30 – 7:30	Dinner with TRSM Decanal team.		· Peer Review Team · Dr. Hong Yu Associate Dean Graduate Programs (TRSM) · Dr. Phil Walsh Interim Associate Dean Faculty and Academic (TRSM) · Dr. Al Goss	Location: Reds Wine Tavern 382 Yonge St #6 (416) 598-3535 Reservation under: Ted Rogers

			Associate Dean, Students (TRSM)	

Peer Review Team Visit PhD in Management Ted Rogers School of Management – Ryerson University				
Thursday, May 23, 2019 – Peer Review Visit Agenda – Day 2				
Meeting Time	**Meeting Topic**	**Meeting Purpose**	**Participants**	**Meeting Notes**

9:00	Peer Review Team (PRT) Hotel Pick Up	Cindy Dunne will meet PRT in lobby of the Sheraton Hotel and accompany the Ted Rogers School of Management (TRSM).	· Dr. M.W. Mohamed Ismail, Professor and Associate Chair, Industrial Engineering Ryerson University · Dr. Jeffrey Parsons University Research Professor, Information Systems Memorial University · Dr. Giovani Caetano da Silveira, Professor and Chair Operations Management , University of Calgary · Ms. Cindy Dunne Director, Strategic Initiatives and Accreditations (TRSM)	Sheraton Hotel 123 Queen Street West Toronto, ON 416-361-1000 Ted Rogers School of Management (TRSM) 55 Dundas Street West Toronto, ON, M5G 2C5 416-979-5000 ext 5119 Cindy Dunne Mobile: 289-442-7599

9:15 – 10:15	Discussion with PhD Curriculum Development Committee	Peer Review Team to meet with a wide cross section of faculty involved in the development of the program proposal.	· Peer Review Team · Dr. Hong Yu Associate Dean Graduate Programs (TRSM) · Dr. Ojelanki Ngwenyama Professor, Global Management and Director of the Institute of Innovation and Technology Management (TRSM) · Dr. Deb Fels Professor, Information Technology Management and Director, Inclusive Media & Design Centre (TRSM) · Dr. Hossein Zolfagharinia Assistant Professor, Operations Management (TRSM) · Dr. Murtaza Haider Associate Professor, Real Estate	Location: Dean's Boardroom 3-006

			Management (TRSM) · Dr. Sergiy Rakhmayil Associate Professor, Finance (TRSM) · Dr. Andre LaPlume Associate Professor Entrepreneurship and Strategy (TRSM) · Ms. Cindy Dunne Director, Strategic Initiatives and Accreditations (TRSM) · Mr. Ben Samms Decision Support Analyst (TRSM) · Mr. Nik Ashton Research Support Specialist	

10:30 – 11:30	Meeting with Graduate Programs Office (TRSM)	Opportunity for Peer Review Team to meet faculty and staff involved in graduate program administration.	· Peer Review Team · Dr. Hong Yu Associate Dean, Graduate Programs (TRSM) · Ms. Nicole Duccomun Director, Graduate Program Administration (TRSM) · Dr. Yuanshun Li Director, MScM Program (TRSM) · Ms. Gloria Fernandes Graduate Program Administrator (TRSM) · Ms. Anna Shevchenko Graduate Program Administrator (TRSM)	Location: Dean's Boardroom 3-006

12:00 – 1:30	Lunch with faculty who served as second readers of PhD in Management proposal	Peer Review Team to meet with faculty who provided a critique of the proposed program.	· Peer Review Team · Dr. Hong Yu Associate Dean, Graduate Programs (TRSM) Graduate Program Administrator (TRSM) · Dr. Wendy Cukier Professor and Director, Diversity Institute (TRSM) · Dr. Kelly MacKay Vice-provost, Academic Ryerson University · Dr. James Tiessen, Associate Professor and Director, School of Health Services Management (TRSM)	Anna Shevchenko to escort Peer Review Team to restaurant. Location: Elm Tree Restaurant 43 Elm St (416) 901-7339 Reservation under: Ted Rogers

2:00 – 3:00	Exit Meeting	Receive preliminary feedback from Peer Review Team in order to improve aspects of the proposal.	· Peer Review Team · Dr. Cory Searcy Associate Dean, Programs, Yeates School of Graduate Studies (YSGS) · Dr. Daphne Taras Dean, TRSM · Dr. Hong Yu Associate Dean, Graduate Programs (TRSM) · Ms. Nicole Duccomun Director, Graduate Program Administration (TRSM) · Ms. Cindy Dunne Director, Strategic Initiatives and Accreditations (TRSM) · Mr. Ben Samms Decision Support Analyst (TRSM)	Location: Four Seasons Boardroom 3-164

3:00 – 3:45	Free time for Peer Review Team	Dean(s) and/or members of the Graduate Program will be available to meet with reviewers if requested. Peer Review Team members will be provided with a quiet space to meet.	· Peer Review Team	Location: Four Seasons Boardroom 3-164
4:00 – 4:30	Meeting with Provost and Vice-President, Academic	Receive preliminary feedback from Peer Review Team in order to improve aspects of the proposal.	· Peer Review Team · Dr. Michael Benarroch Provost and Vice-President, Academic · Ryerson University	Cindy Dunne to escort Peer Review Team to meeting. Location: JOR 1300 350 Victoria Street

RESPONSE TO THE EXTERNAL PEER REVIEWERS RECOMMENDATIONS
Re: Proposed PhD In Management

Prepared by:
Dr. Hong Yu, Associate Dean, Graduate Programs - Ted Rogers School of Management
Dr. Daphne Taras, Dean – Ted Rogers School of Management

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Methodological Graduate Courses at Ryerson 25

This document serves as the response to the report on the proposed PhD in Management, Ted Rogers School of Management (TRSM) submitted by the Peer Review Team (PRT). The PRT was comprised of a three-member panel of reviewers and included Dr. Jeffrey Parsons (Memorial University), Dr. Giovani da Silveira (University of Calgary) and Dr. Mohamed Wahab Mohamed Ismail (Ryerson University). The site visit took place on May 22nd and May 23rd, 2019.

We would like to thank the PRT team for their insight and contributions, along with all of the faculty, staff and students who participated in the site visit.

The PRT was positive about the overall alignment of the proposed PhD in Management program with the mission and objectives of Ryerson University. The PRT produced a report that provides a useful assessment of the proposed program, an appraisal of the challenges it might face, and actionable recommendations. In the next section, we address the recommendations and issues made by the PRT, in the order that they appear in the PRT Report.

Internal Action

1. Specializations

The PRT noted:

There should be an effort to offer specialization courses regularly (rather than as directed studies) according to demand. This can be accomplished by: (i) reducing the minimum number of student registrations to offer a regular course from five to three; and (ii) targeting admissions to admit at least three students in the same specialization each year.

PRT Recommendation:

- Focus on one or two specializations for the initial intake to build a minimum-sized "cohort" of students in each specialization ($n \geq 3$) and allow the offering of the respective specialization courses.

TRSM Response:

We understand that Ryerson has unfilled spaces in its PhD allocation, and the simplest response is to admit more students. This would help Ryerson, and provide a solution to the PRT's concern about too few students in any specialization. Initially, an enrolment of approximately six students (full-time equivalent or FTE) per year was anticipated, however, the Dean has recently been informed by the Provost that additional spaces will be made available to TRSM.

We would have a more robust PhD program if we admitted more students. If Ryerson is willing to double our size to 12 students, we definitely have interest from qualified supervisors. Our sizeable MScM could be a feeder into our PhD program.

As stated in the proposal, students will be recruited for the PhD in Management program from within TRSM, nationally, and internationally. We anticipate that TRSM PhD students will come from a variety of backgrounds, with many returning to school for further education after spending time as professionals. There also may be strong interest from among our MScM students.

Increasing graduate student admissions is a high priority at Ryerson University and TRSM. The competition for domestic graduate students is particularly high among Ontario universities because of targeted funding provided by the provincial government. Ontario universities were allocated access to graduate funding on a competitive basis; like many of the large Ontario universities, Ryerson continues to work toward using this allocation.

The ability to attract PhD students, ensure adequate support and training, and achieve excellent placement will have an enormous impact in TRSM's future as a leader in research and innovation and the reputation across the world. TRSM sees many opportunities for strategic improvement in recruitment, support, and placement. Recognizing that PhD-level recruitment will rely more on individual faculty member's professional network and connections, proper administrative support will be provided to ensure smooth and efficient experiences for the applicants. In addition, substantial effort and resources will be dedicated to growing the number and quality of inquiries entering the admissions funnel. This is an area where TRSM's graduate marketing and recruiting will prove helpful. As well, in 2019, we have encouraged the MScM students to form an association and seek the types of services that meet their unique needs as researchers. We want them to be cooperating with, though functioning independent of the MBA student association.

Central to this effort to increase our PhD student intake are (1) funding for PhD student scholarships and research support, (2) promotion of the PhD program, and (3) a dedicated staff member who, with the guidance of the Dean and Program Director, will design and implement a master plan of coordinated recruiting for all specializations. Much of the funding to attract prospective students will initially come from the Ontario allocation of $25,000 per student, plus the cultivation of senior students as course instructors. Many prospective supervisors have agreed to provide funds from research grants to support PhD students. The recruiting plan will feature strategies tailored to regions (domestic or international), disciplines, and cultural backgrounds. The staff member will coordinate and assist efforts of individual faculty, maintain communication channels with schools and student populations, and track the efficacy of various recruiting methods. Much of the activity of recruitment will take place in the digital space, with program and faculty-member websites, social media presence, and digital advertising all playing a growing role.

2. Admission Criteria

The PRT noted:

Admission criteria listed in Section 2.b.ii of the proposal are generally aligned with the learning outcomes listed in Section 2.a.ii. However two items need further attention. First, there is currently no specified minimum GMAT score. Requiring a minimum GMAT would: (i) provide assurance of the quality of the incoming students; and (ii) weed out weak applications. Potential target minimums are: (i) 550 - to be consistent with minimum requirements for the MBA; or (ii) 600 - to distinguish the PhD as requiring a clearly higher minimum than the MBA. Also, the exemptions from writing the GMAT should be clearly stated (e.g., considerable relevant work experience). This will also help communicate a high admission standard and help maintain or even enhance the quality of the program in the long run.

Second, in the statement of intent and interview, applicants must express interest in developing original knowledge and disseminating research results to advance scholarship and knowledge transfer (L05.c, p.39).

PRT Recommendation(s):

Develop clearer admission criteria:

- Require a GMAT/GRE minimum score (with limited and clearly specified exceptions)

TRSM Response:

To gain admission to proposed PhD in Management, applicants are expected to take a Graduate Management Admission Test (GMAT) and/or a Graduate Record Examinations (GRE).

Upon reviewing the admission requirements of 22 PhD in Management programs across Canada, 18 institutions require a GMAT/GRE; 6 of which do not explicitly state a minimum score.

Although the proposed PhD in Management will have no established minimum score for the GMAT and/or GRE, test results will be an important part of applicants' profile. The Admission Committee will assess each applicant holistically and a low GMAT score will not disqualify a candidate from entering the program just as a high GMAT score does not guarantee entry.

When reviewing applicants' files, a broad range of entry requirements have been proposed and include:

- Master's degree from a recognized university
- GPA = 3.33/4.33 (B+ or equivalent) in a master's program
- Demonstrated graduate level research capability and/or potential (e.g., Thesis, MRP, Peer Review Journal article)
- Knowledge of research methods prior to application as evidenced in their transcripts. (If this knowledge is not evident, applicants must successfully complete a research methods coursework equivalent to MT8103 and MT8104
- Two reference letters at least one of which is from a former professor familiar with the applicant's research abilities and/or potential
- A statement of intent (research interest)
- Interview: An online or in-person interview may be required
- Identification of a confirmed supervisor

Waiver of the GMAT and/or GRE may be considered for applicants who meet at least one of the following conditions:

- Holds a terminal degree (e.g. PhD, MD, JD) from an acceptable institution.
- Holds a MScM degree from TRSM.
- Holds a master's degree from an acceptable institution, with a cumulative GPA of 3.0, and holds a professional certification (e.g., CPA, CFA, CHRM) and a minimum of 5 years of professional work experience.
- Individuals with disabilities who were eligible to receive necessary testing accommodations.

Consideration of a waiver is at the discretion of the Program Director and only if the applicant can provide sufficient evidence of academic ability. Satisfying any of the above criteria does not constitute and automatic waiver and is determined in joint consideration with the rest of the applicants' submission.

PRT Recommendation(s):

- During student interviews, search for explicit evidence of an applicant's interest to develop and publish research that is original, high in quality, and relevant for the specialization field.
- Develop an "interview guide" to better coordinate with and support potential supervisors as they interview student candidates. The guide should indicate what minimum aspects and criteria should be explored in the interviews.

TRSM Response

Once a candidate has been deemed academically capable of doing a PhD, the next step will be an interview. The interview is an important stage in making a match between the potential PhD candidate, and the desired competencies for program success. This next step will allow both candidates, and admission committee members, to determine if the program is a good fit. We appreciate the PRT recommendation and suggestions related to assessing applicant eligibility during the interview process. There are no hard-and-fast rules for selecting the right candidate, but there are some general competences that an 'ideal' candidate will have as suggested by the PRT and include:

- Be prepared to talk about their research interests in detail
- Be prepared to discuss motivation for pursuing a PhD
- Show evidence that they have reviewed potential supervisor's work
- Demonstrated familiarity with current scholarship in the field

A selection guide will be developed for admission committee members and will provide potential supervisors a resource from which to select questions that will help identify the candidate who will be most successful in the program.

An interview guide will provide lists of questions or issues that are to be explored in the course of an interview. An interview guide is important in ensuring that the same basic lines of inquiry are pursued with each applicant interviewed. Admission committee members will maintain the flexibility to build a conversation within a particular subject area, to word questions spontaneously, and to establish a conversational style. The interview guide will also serve as a checklist during the interview to make sure that all relevant questions are covered.

3. Course Requirements

The PRT noted:

However, we noted several limitations with the proposed curriculum. First, the program appears to be light on course requirements. The number of courses should be more consistent with existing programs in Canada, as indicated on Table 2.5, which includes the number of required rather than total courses in each regular program.

Also, the three proposed research seminars do not appear to be equivalent to regular courses as considered in other institutions. Thus, we suggest increasing the total number of courses (which may include required and a minimum number of electives) in the curriculum.

We agree with "Respondent C" in the document "Authorization form and summary of responses" that the proposed quantitative methods course fails to include several tools and techniques that can be

fundamental for research in many (if not all) of the program specializations. That includes content in econometrics, analytics, modeling, and simulation, among other quantitative tools. Should the school disregard the previous recommendation and maintain the current course load, this alternative can be implemented by requiring students to take a minimum of two elective methods courses in the first year rather than the currently proposed quantitative (statistics) and qualitative methods courses.

PRT Recommendation:

- All students should be required to take an additional research methods course. The specific additional course can vary between specializations, depending on the need.

TRSM Response:

Students will be required to take nine courses, and the number of additional required courses will be determined by the Supervisory Committee. Following admission to the PhD in Management, the Supervisor/Supervisory Committee will determine (based upon students' academic background and interests) if additional coursework is required.

Each student will be expected to develop conceptual and analytical skills appropriate for the evaluation of theories and the analysis of quantitative and/or qualitative data pertaining to their area of research. This may require students to complete additional courses in a major area directed towards the dissertation research. Students will master a specific set of methods appropriate to their dissertation, with the depth needed to produce methodologically rigorous research.

Applicants must have demonstrated knowledge of research methods prior to applying, as evidenced in their transcripts. If this knowledge is not evident, applicants must successfully complete a research methods coursework equivalent to SM8103 and SM8104 (Research Methods courses in the Master of Science in Management program). Some candidates may be expected to exceed the minimum two courses of advanced methods. Specific courses appropriate for the methods requirement will be selected in consultation with the Supervisor.

Registration requirements in doctoral level courses vary across institutions and specializations within the respective PhD programs. In reviewing the 22 programs in Canada we observed the following:

Research Methods Course Requirements:

- 11 institutions require two research methods courses
- two institutions require two or three research methods courses depending on specialization
- one institution requires four research methods courses
- six institutions require three research methods courses
- in two cases it was unclear

Other Course Requirements

- seven institutions require a statistics course for all students
- five institutions require a statistics course depending on specialization
- seven institutions require an econometrics course for all students
- two institutions require an econometrics course depending on specialization

Following the PRT visit, and at the request of the PRT, a comprehensive listing of Research Methods courses available via TRSM and Ryerson University was supplied. Students have access to advanced doctoral methods and theory courses that are offered across the University. TRSM will work with other faculties to cross-list courses and avoid duplication. See Appendix A: Research Methods Courses Available at TRSM and Ryerson University.

The PRT noted:

Curriculum expansion should also include a course on Philosophy of Science/Theory Development to enable students to explore ontological and epistemological foundations of research activity.

PRT Recommendation:

- Consider offering a course on Philosophy of Science and/or Theory Development in the first year for all specializations.

TRSM Response:

The number of courses may vary according to the student's particular program and background. Students work closely with their research-active supervisors who help guide them to the appropriate courses within and outside the School. If the Supervisor/Supervisory Committee deems it necessary for the student to take a Philosophy of Science and/or Theory Development in the first year, with the Graduate Program Director's approval, the student may take it from a program internal or external to Ryerson University.

4. Student Funding

The PRT Noted:

Even though the subject was covered in at least two meetings, it was still not clear to the review committee how much and in what circumstances the planned financial support to students (about $25,000 per year, for four years) could be obtained. Faculty and staff indicated a range of available options, including scholarships, grants, and teaching. However, there is no clear indication in the proposal of the extent (i.e., budget) to which these items will be available, and the criteria for their award/disbursement. We strongly encourage TRSM to articulate the various funding sources, the amounts available per student and overall by the school, application and award criteria, and (in the case of grants) what expenses are allowed. In addition, TRSM should establish and communicate clear requirements for PhD students to teach during their program. For example "students should teach at least two courses as part of their training in the PhD program."

PRT Recommendation:

Develop clear processes for managing student funding including scholarships, grants and other awards. Ensure the PhD program website makes clear that part-time students are not funded.

TRSM Response:

As referenced on the Ryerson University website, the University provides financial support in the form of scholarships, awards or assistantships for as many full-time students as possible. Scholarships and awards are offered on a competitive basis.

Adequate funding for all PhD students is a key priority of the program and as stated in the proposal student funding support would be a multi-pronged approach that includes: internal and external fellowships and scholarships, teaching assistantships, graduate assistantships, and research stipends and assistantships. Eligible domestic students admitted to study full time would receive a minimum of $25,000 a year for up to four years composed of a combination of these sources. Incoming full-time PhD students are the top hiring priority for TA/GAs. Competitive scholarship opportunities include tri-council (Natural Sciences and Engineering Research Council (NSERC), the Canadian Institutes of Health Research (CIHR), the Social Sciences and Humanities Research Council (SSHRC), among others (e.g., Vanier, OGS). There are a number of funding packages – internal and external – available to Ted Rogers graduate students. Thanks to a generous donation from Ted and Loretta Rogers, each year the Ted Rogers School of Management issues a total of Graduate Entrance Scholarships and Awards of more than $450,000. Augmenting these is a priority of TRSM Development staff. TRSM endowments have grown by 14% between 2011 and 2015, standing at $39.2M.

Additionally, the federal government has allocated funds to support graduate student scholarships. Over five years starting in 2019, the budget earmarks $114 million, with $26.5 million per year ongoing, to the federal granting councils to create 500 new master's level scholarships awards and 167 more three-year doctoral scholarships awards annually through the Canada Graduate Scholarship program.

As per Ryerson University Senate Policy 139 "However, the offer of admission will not necessarily provide a guarantee of financial support to prospective graduate students. Students will be expected to have sufficient means of financial support (e.g., support offered by Ryerson and elsewhere) for the length of time normally required to complete the graduate program in which they intend to enroll."

The internal funding for doctoral students at Ryerson typically comes from three sources: YSGS provides a pool of funds to be distributed, TA/GA opportunities and in some cases, there are RA and stipend research funds available from individual faculty members' SRC work. TRSM offers 15 internal SRC Development Grant of $7,000 each annually and they would be available to the PhD students to apply with their supervisors.

Working with the Program Director and directing students to YSGS website resources, PhD candidates will be encouraged to apply for external funding and awards, including support from the Government of Canada, national foundations, and the Province of Ontario. Our graduate students are highly competitive in these scholarship. Information sessions and workshops hosted within TRSM and by YSGS will be offered throughout the academic year. Given that the students have the potential to propose research that is fundable from the three grant councils it is important that the School identify, early after approval, faculty members who can serve as mentors.

5. Handling Issues with PhD students

PRT Recommendation:

- Develop a process to handle issues with PhD students (e.g., switching Ph.D. thesis supervisor).

TRSM Response:

The University provides guidelines on the roles of the supervisor and the graduate student. Students accepted to the proposed PhD in Management will require a supervisor. TRSM recognizes that it is incumbent on the Faculty and University to do everything possible to provide guidance in how to

maximize the likelihood of excellent supervision. The Yeates School of Graduate Studies (YSGS) is charged with the responsibility of providing that guidance for the University graduate community.

YSGS provides policies and general guidelines that inform "best practices," that are likely to help make the dissertation experience a rewarding one for students and supervisors as well as ensure successful completion. These Guidelines provide direction on choosing a supervisor, establishing a supervisory committee, and maintaining a productive working relationship among all three. They point to the respective responsibilities of students, supervisors, and graduate units (departments, centres, and institutes). They also provide advice on reducing and solving problems that may arise. A "Student-supervisor discussion checklist" and "Graduate Supervision Guidelines" documents can be found on the YSGS website at https://www.ryerson.ca/graduate/faculty-staff/graduate-supervision/.

TRSM will develop its internal operation manual to articulate and concretize the processes of addressing various issues, including students, under the policy framework of the Yeates School of Graduate Studies (YSGS) and the University.

6. Guidelines for Writing Different Types of PhD Thesis

PRT Recommendation:

- Develop guidelines for writing two different types of PhD thesis (monograph versus manuscript-based).

TRSM Response:

We appreciate the recommendation. There is no prescribed format for a thesis at Ryerson University, most take the form of a "traditional" thesis, a "manuscript-based" thesis, or hybrid of the two. Whether a candidate chooses a manuscript-based thesis or a traditional thesis, it's important that the document is consistent in both form and style.

As an alternative to the traditional thesis format, a manuscript-style thesis consists of a collection of papers of which the student is an author or co-author. These papers must be presented in a cohesive manner and with a coherent theme. The decision to proceed with a manuscript-type thesis is decided in consultation with the student's supervisor(s) or supervisory committee, who must ensure that all the criteria listed below are met, and will ensure the thesis conforms to the format outlined by the Yeates School of Graduate Studies (YSGS). The "Guidelines for Manuscript-Style Master's or Doctoral Theses" document can be found on the YSGS website at https://www.ryerson.ca/content/dam/graduate/current-students/policies/manuscript_style_thesis.pdf.

At the suggestion of the PRT to develop guidelines for the writing of different types of PhD thesis, TRSM reviewed a number of websites from Canadian Universities. Common themes describe the submission of the thesis as the following:

- doctoral thesis must demonstrate original scholarship that makes a significant contribution to knowledge in the candidate's field of study
- the thesis describes research completed during the student's academic program
- demonstrate an ability to carry out research and to organize results

- students should strive to write in a style that is clear, concise and interesting as well as informative
- thesis should demonstrate a mastery of the literature relevant to the subject
- thesis must meet the standards and requirements established by the Theses Canada at Library and Archives Canada

We note that PRT member institutions have excellent guides for formatting and distinguishing between differing thesis types. In addition to the formatting guidance offered internally by YSGS, we are prepared to create an expanded internal document for supporting faculty and students.

A student's dissertation must be prepared and submitted in strict accordance with procedures outlined by the Yeates School of Graduate Studies (YSGS) and for dissertations, with the current regulations of the Library and Archives Canada. Students will be made aware that the responsibility for formatting and submitting the correct format rests with the author.

To help students prepare and submit their dissertation in accordance with proper procedures, YSGS has developed a guide for graduate student use. This guide can be found on the YSGS website at https://www.ryerson.ca/graduate/student-guide/academic-matters/dissertation-thesis-exams/

External Action

1. Library Resources

The PRT Noted:

Facilities at TRSM, including resources from Ryerson Library, are appropriate to support the proposed Ph.D. program. The Library has assessed the materials needed to support the proposed PhD program and indicated additional resources of approximately $130,000 per year that need to be acquired. It is unclear whether the University has committed to providing the additional budget for these acquisitions. Program website must indicate that the part-time students are not funded.

PRT Recommendation:

Acquire additional library electronic resources and journal subscriptions as indicated in Appendices 3 and 4 of the "Library Response" document. In particular, we recommend subscribing to the Business Source Complete database and to the Marketing Science journal (if this is not included in the new database).

TRSM Response:

We strongly support the acquisition of electronic resources and journals to support the proposed program (value: $130,000 per year). We are committed to working with the Chief Librarian, Content Librarian, TRSM Dean, and YSGS, during the early years of the program implementation, to continuing to enhance the library collection to support the PhD in Management.

2. Develop a DBA Program

The PRT noted:

Part-time students may come from industries and the focus of their research activities might be related to the problems they face in their industries. Such students' research must be able to meet rigorous quality required to be publishable. In some cases, an industry may not want to publish the research, which uses real data. Such issues must be addressed to meet the "Graduate Degree Level Expectations".

PRT Recommendation:

Develop a proposal to introduce a Doctor of Business Administration program for students looking at careers in business management rather than in public/private research or academia.

TRSM Response:

Taking its direction from TRSM Faculty Council, the Ad hoc Committee on Doctoral Program Feasibility presented an analysis of the merits of both a PhD and DBA program at the February 8, 2017 meeting of Faculty Council. The presentation looked at the PhD landscape in Canada, the objectives of having a doctoral program, the type/model of a proposed doctoral program and next steps. TRSM Schools/Departments were asked at the time to provide feedback on this topic.

Based upon feedback solicited, it was suggested that the DBA is a lesser known credential in Canada and that a DBA must be applied in nature where as a PhD could be both. The committee presented that a PhD would best serve the needs of the Faculty, provide the most flexibility for entering either academic or professional research careers and be most recognized.

Additional concerns expressed over the nomenclature of a DBA included the need for a more established brand in executive education, the typically high tuition model that would be counter to Ryerson's accessibility goals, low likelihood of hiring to an academic position and lack of DBAs in Canada.

The PhD was endorsed at the September 27, 2017 meeting of Faculty Council:

The proposed PhD in Management is an intensive research focused training program and ideally academic opportunities would be tenure-track. The PhD in Management program is designed to prepare individuals for teaching and research careers in universities or for applied research positions in either the private or public sector.

3. Directed Reading Courses

PRT Recommendation:

- Offer Directed Reading courses in lieu of elective (or any other course) only when there are fewer than three (rather than five) students enrolled.

TRSM Response:

We agree with the recommendation. Although the School recognizes that some specialization electives may attract fewer students, the goal is to minimize the number of very small courses without damaging

the scope and variety of the program. When pre-term registration data shows that a class is unlikely to make the approved minimum, the class may either be cancelled or written requests for the continuation (with reasons stated) will be sent to the to the Dean prior to the beginning of the term in which the course is to be offered. The minimum of five students was established in consultation with the Dean, however, further to the PRT visit and news that TRSM will be allocated additional spaces for PhD students, the Dean is prepared to revisit the enrolment threshold if necessary.

Summary of Peer Review Team (PRT) "Internal' Recommendations and Ted Rogers School of Management (TRSM) Responses

Peer Review Team Recommendation	TRSM Graduate Program Response
1. Focus on one or two specializations for the initial intake to build a minimum-sized "cohort" of students in each specialization (n ≥ 3) and allow the offering of the respective specialization courses.	● Approve a larger TRSM cohort within the Ryerson allocation ● Students will be recruited for the PhD in Management program from within TRSM, nationally, and internationally. There also may be strong interest from among TRSM MScM students. ● Increasing graduate student admissions is a high priority at Ryerson University and TRSM. ● Initially, an enrolment of approximately six students (full-time equivalent or FTE) per year was anticipated, however, the Dean has recently been informed that additional spaces will be made available to TRSM. ● TRSM sees many opportunities for strategic improvement in recruitment, support, and placement. Recognizing that PhD-level recruitment will rely more on individual faculty member's professional network and connections, proper administrative support will be provided to ensure smooth and efficient experiences for the applicants. ● Substantial effort and resources will be dedicated to growing the number and quality of inquiries entering the admissions funnel. Support and resources will include: 1) funding for PhD student scholarships and research support, (2) promotion of the PhD program, and (3) a dedicated staff member who, with the guidance of the Dean and Program Director, will design and implement a master plan of coordinated recruiting for all specializations. ● Much of the funding to attract prospective students will initially come from the Ontario allocation of $25,000 per student, plus the cultivation of senior students as course instructors. ● Many prospective supervisors have agreed to provide funds from research grants to support PhD students.
2. Develop clearer admission criteria:	● To gain admission to proposed PhD in Management, applicants are expected to take a Graduate Management

2a. Require a GMAT/GRE minimum score (with limited and clearly specified exceptions).	Admission Test (GMAT) and/or a Graduate Record Examinations (GRE). ● Although the proposed PhD in Management will have no established minimum score for the GMAT and/or GRE, test results will be an important part of applicants' profile. The Admission Committee will assess each applicant holistically. ● When reviewing applicants' files, a broad range of entry requirements have been proposed and are consistent with YSGS graduate program admission criteria at Ryerson University. ● Waiver of the GMAT and/or GRE may be considered for applicants who meet conditions that are now clearly articulated. ● Consideration of a waiver is at the discretion of the Program Director and only if the applicant can provide sufficient evidence of academic ability.
2b. During student interviews, search for explicit evidence of an applicant's interest to develop and publish research that is original, high in quality, and relevant for the specialization field.	● Once a candidate has been deemed academically capable of doing a PhD, the next step will be an interview. ● There are no hard-and-fast rules for selecting the right candidate, but there are some general competences that an 'ideal' candidate will have as suggested by the PRT and include: ○ Be prepared to talk about their research interests in detail ○ Be prepared to discuss motivation for pursuing a PhD ○ Show evidence that they have reviewed potential supervisor's work ○ Demonstrated familiarity with current scholarship in the field ● A selection guide will be developed for admission committee members and will provide potential supervisors a resource from which to select questions that will help identify the candidate who will be most successful in the program.
2c. Develop an "interview guide" to better coordinate with and support potential supervisors as they interview student candidates. The guide should indicate what minimum aspects and criteria should be explored in the interviews.	● An interview guide will be developed and provide lists of questions or issues that are to be explored in the course of an interview. ● Admission committee members will maintain the flexibility to build a conversation within a particular subject area, to word questions spontaneously, and to establish a conversational style.

	● The interview guide will also serve as a checklist during the interview to make sure that all relevant questions are covered.
3. Revise course requirements: 3a. All students should be required to take an additional research methods course. The specific additional course can vary between specializations, depending on the need.	● Students will be required to take nine courses, and the number of additional required courses will be determined by the Supervisory Committee. ● Following admission to the PhD in Management, the Supervisor/Supervisory Committee will determine (based upon students' academic background and interests) if additional coursework is required. ● Students will master a specific set of methods appropriate to their dissertation, with the depth needed to produce methodologically rigorous research. ● Applicants must have demonstrated knowledge of research methods prior to applying, as evidenced in their transcripts. If this knowledge is not evident, applicants must successfully complete a research methods coursework equivalent to SM8103 and SM8104 (Research Methods courses in the Master of Science in Management program). ● Specific courses appropriate for the methods requirement will be selected in consultation with the Supervisor. ● Following the PRT visit, and at the request of the PRT, a comprehensive listing of Research Methods courses available via TRSM and Ryerson University was supplied.
3b. Consider offering a course on Philosophy of Science and/or Theory Development in the first year for all specializations.	● The number of courses may vary according to the student's particular program and background. ● If the Supervisor/Supervisory Committee deems it necessary for the student to take a Philosophy of Science and/or Theory Development in the first year, with the Graduate Program Director's approval the student may take it from a program internal or external to Ryerson University.
4. Develop clear processes for managing student funding including scholarships, grants and other awards. Ensure the PhD program website makes clear that part-time students are not funded.	● Funding support would be a multi-pronged approach that includes: internal and external fellowships and scholarships, teaching assistantships, graduate assistantships, and research stipends and assistantships. ● Eligible domestic students admitted to study full time would receive a minimum of $25,000 a year for up to four years composed of a combination of these sources. ● Incoming full-time PhD students are the top hiring priority for TA/GAs. ● TRSM issues more than $450,000 in Graduate Entrance Scholarships and Awards annually.

	● Starting in 2019, the federal government budget earmarked $114 million, with $26.5 million per year ongoing, to the federal granting councils to create 500 new master's level scholarships awards and 167 more three-year doctoral scholarships awards annually through the Canada Graduate Scholarship program. ● Internal funding for doctoral students at Ryerson typically comes from three sources: o YSGS provides a pool of funds to be distributed o TA/GA opportunities o RA and stipend research funds available from individual faculty members' SRC work ● TRSM offers 15 internal SRC Development Grant of $7,000 each annually and they would be available to the PhD students to apply with their supervisors. ● PhD candidates will be encouraged to apply for external funding and awards, including support from the Government of Canada, national foundations, and the Province of Ontario. ● Information sessions and workshops to support applications for funding will be hosted within TRSM and by YSGS throughout the academic year. ● Students will be encouraged to seek out competitive scholarship opportunities such as tri-council (Natural Sciences and Engineering Research Council (NSERC), the Canadian Institutes of Health Research (CIHR), the Social Sciences and Humanities Research Council (SSHRC), among others (e.g., Vanier, OGS).
5. Develop a process to handle issues with PhD students (e.g., switching Ph.D. thesis supervisor).	● The University provides guidelines on the roles of the supervisor and the graduate student. ● A "Student-supervisor discussion checklist" and "Graduate Supervision Guidelines" documents can be found on the YSGS website at https://www.ryerson.ca/graduate/faculty-staff/graduate-supervision/. ● TRSM will develop its internal operation manual to articulate and concretize the processes of addressing various issues, including students, under the policy framework of the Yeates School of Graduate Studies (YSGS) and the University. ● YSGS provides policies and general guidelines that inform "best practices," that are likely to help make the dissertation experience a rewarding one for students and supervisors as well as ensure successful completion.

6. Develop guidelines for writing two different types of PhD thesis (monograph versus manuscript-based).	● There is no prescribed format for a thesis at Ryerson University, most take the form of a "traditional" thesis, a "manuscript-based" thesis, or hybrid of the two. ● Whether a candidate chooses a manuscript-based thesis or a traditional thesis, it's important that the document is consistent in both form and style. ● A manuscript-style thesis must be presented in a cohesive manner and with a coherent theme. ● The decision to proceed with a manuscript-type thesis is decided in consultation with the student's supervisor(s) or supervisory committee ● The supervisor will ensure the thesis conforms to the format outlined by the Yeates School of Graduate Studies (YSGS). The "Guidelines for Manuscript-Style Master's or Doctoral Theses" document can be found on the YSGS website at https://www.ryerson.ca/content/dam/graduate/current-students/policies/manuscript_style_thesis.pdf. ● We note that PRT member institutions have excellent guides for formatting and distinguishing between differing thesis types. ● A student's dissertation must be prepared and submitted in strict accordance with procedures outlined by YSGS and with the current regulations of the Library and Archives Canada. ● YSGS has developed a guide for graduate student use. This guide can be found on the YSGS website at https://www.ryerson.ca/graduate/student-guide/academic-matters/dissertation-thesis-exams/

Summary of Peer Review Team (PRT) "External" Recommendations and Ted Rogers School of Management (TRSM) Responses

Peer Review Team Recommendation	TRSM Graduate Program Response
1. Acquire additional library electronic resources and journal subscriptions as indicated in Appendices 3 and 4 of the "Library Response" document. In particular, we recommend subscribing to the Business Source Complete database and to the Marketing Science journal (if this is not included in the new database).	● We strongly support the acquisition of electronic resources and journals to support the proposed program (value: $130,000 per year). ● We are committed to working with the Chief Librarian, Content Librarian, TRSM Dean, and YSGS, during the early years of the program implementation, to continuing to enhance the library collection to support the PhD in Management.
2. Develop a proposal to introduce a Doctor of Business Administration program for students looking at careers in business management rather than in public/private research or academia.	● Taking its direction from TRSM Faculty Council, the Ad hoc Committee on Doctoral Program Feasibility presented an analysis of the merits of both a PhD and DBA program at the February 8, 2017 meeting of Faculty Council. ● Based upon feedback solicited, it was suggested that the DBA is a lesser known credential in Canada and that a DBA must be applied in nature where as a PhD could be both. ● The committee presented that a PhD would best serve the needs of the Faculty, provide most flexibility for entering either academic or professional research careers and be most recognized. ● The proposed PhD in Management is an intensive research focused training program and ideally academic opportunities would be tenure-track. ● Concerns expressed over the nomenclature of a DBA included: ○ the need for a more established brand in executive education ○ the typically high tuition model ○ low likelihood of hiring to an academic position ○ lack of DBAs in Canada.

3. Offer Directed Reading courses in lieu of elective (or any other course) only when there are fewer than three (rather than five) students enrolled.	● We agree with the recommendation.

APPENDIX A

Methodological Graduate Courses at TRSM

Business Administration

Course Code	Course Type	Graduate Level	Course Title	Course Description
MB8206	Elective	Master's	Internatztn of Retailing	This course examines the challenges and opportunities that exist in worldwide retailing. Using spatial analysis, students examine the growth of retail concentration and the reach of worldwide retailers and compare retailing across international borders. Students are exposed to fast turnaround global supply chain and logistics systems. Topics include geographic, global, city and company perspectives, and necessary approaches to logistics including accessing, assessing and interpretation of market data.
MB8403	Elective	Master's	Competitive and Mrkt Analysis	This course provides a comprehensive framework, for analyzing the competitive scope of an industry, the industry itself, and the market space that a company occupies within an industry. The course provides students with the necessary analytical tools to evaluate the environment within which a company operates, and an opportunity to apply these analytical skills in a practical situation. The course centres on developing the platform on which a company builds a marketing strategy.
MB8501	Elective	Master's	Geo-demographics	This course examines the conceptual, methodological and practical issues associated with the application of multivariate spatial techniques to market area analysis and geo-segmentation. Topics include data sources; geo-demographic market segmentation in theory and practice; marketing projects and future directions in data, technology and applications.
MB8503	Elective	Master's	Business Geomatics	This course provides a working knowledge of GIS (Geographic Information Systems); the use of spatially referenced information, and applications of various geo-visualization methodologies to both the planning and management of major retail/commercial developments. The student is trained in the use of GIS software programs (MapInfo; ArcGIS); and given

				access to the relational databases and spatial information available from the Centre for the Study of Commercial Activity.
MB8504	Elective	Master's	Rtl Location and Dev Strats	This course examines retail and commercial development from a variety of perspectives. Topics include the principles of store location research; understanding the drivers of the retail economy; creating a retail location database; developing sales forecasting models for the corporation; measuring market saturation and store cannibalization; selecting the appropriate location strategy; closing the deal and portfolio management.
MB8506	Elective	Master's	Real Estate Finance	This course explores the foundations of real estate mathematics, capitalization rates; property appraisal process and issues related to real property assessment. It also focuses on specific types of real estate development, understanding the pro forma, the effect of leases on value, the role of pension funds and real estate investment trusts and private equity markets in the Canadian real estate industry, and the relation between land value and land use.
MB8602	Required	Master's	Investments and Portfolio Analysis	This course covers analyses of equity, fixed income, derivative and alternative investments. The second half of the course focuses on portfolio management. This course is appropriate for students who want to write the CFA exam. Prerequisite: MB8104 and MT8215.
MB8703	Elective	Master's	Corporate Financial Analysis	This course looks at the question of how a financial institution controls and hedges itself against all of the various risks that it faces. The course looks at liquidity management, deposit insurance, capital adequacy, credit risk management, loan securitization, interest rate forwards, futures, swaps, caps, floors and collars and how banks use these derivative products to manipulate its exposure to various types of risk. Antirequisite: FIN801.
MB8712	Elective	Master's	Industry Analysis	This course presents a comprehensive framework for analyzing a company's industry. It provides analytical techniques to forecast industry trends, to understand the markets and competitive environment, and to understand the forces that will impact on its future success. An industry analysis is the underpinning for developing a successful strategy, and it provides clarity for the company's position within an industry. Antirequisite: MKT731.
MB8714	Elective	Master's	Bus Forecasting Techniques	This course deals with the application, usefulness and limitations of some of the more important and widely used time series forecasting techniques, including Box-Jenkins. A forecasting project will provide the student with

				insight into the practical problems of forecasting such as data acquisition, model selection and the analysis and interpretation of results. Analysis will be completed using the appropriate software and platforms. Antirequisite: QMS703.
MB8715	Elective	Master's	Decision Models for Managers	This is a practical course dealing with the application of Management Science to business decision problems. Emphasis is placed on the study of mathematical models of common business situations and the related mathematical solutions. Topics include Queuing Theory, Markov chains, and Simulation. Practical application of these topics in the areas of marketing, production and finance are stressed. Analysis will be done using appropriate software and platforms. Antirequisite: QMS751.

Master of Science in Management (MScM)

Course Code	Course Type	Graduate Level	Course Title	Course Description
MT8312	Elective	Master's	Business Analytics for Managers	This course provides an overview of the development and usage of decision support systems (DSS), data mining and collaboration technologies. Students will learn how database technologies support managerial decision making, and will understand the role of the data warehouse in supporting DSS and data mining applications. Antirequisite: MT8301.
MT8313	Elective	Master's	Social Media Analytics	This course covers the basic principles and practices of knowledge management, the technology to support knowledge sharing and the issues in designing and implementing a value-based knowledge management system in an organization. Topics include: understanding today's knowledge economy and knowledge workers; enabling knowledge creation; knowledge maintenance: accuracy, currency, accessibility; developing a knowledge management strategy; information policies, measuring value, change management and human factors in implementing a knowledge management system. Antirequisite: MT8302, MT8303.
MT8317	Elective	Master's	Info Arch Theory	This is an advanced foundational course in information architecture theory, focusing on application of theories to systems design projects

				involving database or knowledge management systems. This course explores theoretical perspectives on information architecture principles by demonstrating the application and development of an information architecture required to support an overall IT and Business Strategy. This course utilizes an experiential learning design and will provide students the opportunity design an information architecture model for a complex system. Antirequisite: ITM613.
MT8322	Elective	Master's	Data Warehousing Methods	This course explores fundamental principles that underlie the wide spectrum of activities and processes associated with discovering useful knowledge from aggregate data in a business setting. The course structure is based upon three major technologies that enable the transformation of data into knowledge: data warehousing, OLAP, and data mining. The emphasis of the course will be on the application, implementation and integration of the technologies with the business process and strategic goals of the enterprise. Antirequisite: ITM729.
MT8327	Elective	Master's	Data Management and Visualization	This course focuses on three areas data science relevant to business analytics: (1) data discovery; (2) data preparation; and (3) data visualization. The objective of the course is to help students develop competence in acquiring data from different sources, cleaning and preparing the data for analysis and developing visualizations of the results for managerial decision making. The course will be problem oriented following the outcomes based action learning approach in order to provide hands-on training in the use of common data management and business analytics applications and tools. Students will be expected to construct evidence based arguments from the results of their data analyses, develop and present business case reports in a manner appropriate for managerial decision making.
MT8328	Elective	Master's	Supply Chain Analytics	This course emphasizes systemic modeling of management problems and application of well-established quantitative techniques for their solutions. The supply chain area is naturally abundant with problems of this kind, but the skills obtained in the course will be applicable in a variety of management contexts. Both optimization and satisficing approaches with deterministic as well as stochastic components are covered. The course equally emphasizes modeling as well as solutions; where for the latter MS

				Excel is the main platform with various add-ins such as the (premium) Solver, Lingo, Crystal Ball, and TreePlan. Students will be expected to construct evidence based arguments from the results of their data analyses, develop and present business case reports in a manner appropriate for managerial decision making.
MT8426	Elective	Master's	Sport Media and Mktg. Bus. Analytics	This course will examine a broad range of sport media and marketing analysis – in both theory and practice – through the lens of the sport and entertainment industry. Topics will include an overview of data-drive decision making in sport, sport media marketing analysis and insights, consumer behavior of the changing Canadian sport fandom, advances in sport technology and innovation, measurement and evaluation (including community).
MT8511	Elective	Master's	Operations Mgmt and Process Improvement	Successful operations management requires a broad understanding of operational strategy, business processes, enterprise systems technologies, and process improvement techniques. Students will gain experience analyzing business processes and designing improved workflows using a variety of enterprise systems (e.g. ERP and CRM), business performance management, project management, and Lean Six Sigma tools and techniques.
MT8512	Elective	Master's	Logistics and Inventory Mgmt	The course will address advanced supply chain management issues including the following topics: facility location, design of distribution networks, demand forecasting, inventory management, aggregate planning, transportation decision-making, use of IT, sourcing, and pricing. The course will emphasize the use of analytical methods and will also incorporate risk management in business logistics.
MT8513	Elective	Master's	Intro to Operations Research	This course provides an overview of the basic principles of Operations Research with special emphasis on the paradigms associated with linear programming and queuing theory. These include generic modelling; mathematical modelling; the 'max', 'min', and 'mixed case' simplex algorithms; sensitivity analysis; duality; 'assignment', 'transportation' and 'transhipment' models; and basic principles and models associated with queuing or 'waiting-line' problems. These subjects will be studied from both theoretical and practical perspectives. The class requires background

				in probability theory and linear algebra as well as some skills in computer programming.
MT8519	Elective	Master's	Logistics Management I	The goals of this course are to develop an understanding of the logistics process, and to acquire analytical skills in monitoring the ability to provide end customer satisfaction and financial effectiveness. The core competencies in this course start with study of decision strategies in warehousing and inventory management. The course continues with a study of order processing and decision support systems. The course concludes with a look at global logistics and the strategic logistics plan. Antirequisite: RMG903.
MT8520	Elective	Master's	Logistics and Transportation Management	This course explores the application of analytical diagnostic tools to the logistics sphere with a view to optimizing end customer satisfaction and financial effectiveness through optimal use of the supply chain system. Topics include: activity based costing, productivity, total quality management (TQM) and JIT systems, utilization, and performance measures to improve effectiveness and efficiency. The core competencies in this course start with a study of channels of distribution and transportation. Prerequisite MT8519, Antirequisite: RMG904.

Methodological Graduate Courses at Ryerson

Chemical Engineering

Course Code	Course Type	Graduate Level	Course Title	Course Description
CE8139	Elective	Master's, PhD	Prob, Stat and Stochastic Proc	This course is an introduction to stochastic processes and probabilistic models. Statistical interference techniques are also discussed. Topics covered include: probability and random variables, Bernoulli, Binomial, Markov, Poisson, Wiener and Gaussian models, stationarity and cyclostationarity, spectra of various signals, linear mean-square estimation, representation of random signals and Karhunen-Loeve expansion, Markov chains and processes, parameter estimation, mean variance, confidence intervals, Bayesian models, hypothesis testing. Antirequisite EN8910, ME8139.
CE8202	Elective	Master's, PhD	Advanced Process Control	System identification. Review of linear control systems and state space. Design methods of multivariable control systems. Model Predictive Control: Internal Model Control (IMC) and Dynamic Matrix Control. Applications to chemical processes.
CE8210	Elective	Master's, PhD	Process & Engineering Optimization	The use of optimization methods is pervasive throughout the process industries. Thus, these techniques are an important part of a chemical engineer's tool set. This course will provide a blend of important theoretical concepts and practical implementation issues. The development of a student's ability to formulate optimization problems, select solution techniques and interpret results will be emphasized. Finally, through a series of industrially relevant problem sets, the students will gain exposure to popular optimization software. Extra project/assignments are required, weighing no less than 20-30% of the final grade. Antirequisite CHE425
CE8213	Elective	Master's, PhD	Advanced Numerical Methods	Review of numerical analysis. Includes: solution of systems of linear and nonlinear algebraic equations, interpolation, least squares fitting, integral and derivative evaluations, and solution of ordinary and partial differential equations. Introduction to the numerical solution of systems of linear and nonlinear partial differential equations using finite difference and finite element methods. Includes: error analysis, non-uniqueness and stability in

				nonlinear systems, continuation, isoparametric mapping, time integration techniques, time step controller, and mesh refinement strategies. Includes practical applications to science and engineering. Programming is required throughout the course. Antirequisite EN8913.

Civil Engineering

Course Code	Course Type	Graduate Level	Course Title	Course Description
CV8501	Elective	Master's, PhD	Adv Geospatial Info Systems	This course covers such advanced topics as data models, structures and indexing; database management; geospatial analysis and modeling; geographic visualization; macro language programming and GIS software customization; distributed geospatial processing; standards and implementation issues.
CV8504	Elective	Master's PhD	Estimation and Data Series Analysis	Overview of linearization and probability distributions. Least-squares estimation, batch and sequential estimation methods, constraints. Linear and nonlinear regression. Trend analysis. Concept and classification of stochastic processes, auto- and crosscorrelation functions, and spectral density function. Some common stochastic models. Kalman filtering.

Computer Networks

Course Code	Course Type	Graduate Level	Course Title	Course Description
CN8810	Required	Master's	Introduction to Computer Networks	This course offers a general introduction to computer networks. It explores goals, services and problems with computer networks. Computer communication is examined using the seven-layer OSI model. The purpose of each layer is discussed both from conceptual and practical aspects. Topics include: OSI model, layered architecture, data link protocols, LAN protocols, WAN protocols and details of Internet protocol. There will be several lab projects to reinforce the topics discussed in the lectures.

CN8811	Required	Master's	Multimedia Processing and Digital Communication	The course first covers the basic concepts in source and channel coding techniques. It subsequently introduces various aspects of multimedia processing. Topics include: sampling, quantization, PCM, DPCM, delta modulation, line coding, digital modulation, information theory on entropy, Huffman coding, Lempel Ziv coding, model-based coding, information theory on channel capacity, linear block codes, cyclic codes, convolutional codes, trellis code modulation, multimedia data compression standards, and multimedia information retrieval. Theoretical concepts will be re-enforced through some real-time experiments in the laboratory using Matlab and C.
CN8813	Required	Master's	IP Protocols	The course provides an in-depth coverage of the Internet protocols. It has two main focuses. First, it studies various interior gateway protocols: RIP, IGRP, Enhanced IGRP, and OSPF. It then concentrates on the protocols related to the Internet operations and management, such as ICMP, DHCP, DNS, and SNMP. Other topics include multicasting and IPv6. Prerequisite: CN 8810.
CN8814	Required	Master's	Network Math and Simulations	This course provides foundations in probability and random processes, and develops the understanding of Markov processes and the simulation of Markov Chains. The course also covers queuing systems and Monte Carlo simulation. Basic simulation and modeling techniques are then discussed, followed by output data analysis. The course concludes with various Computer Networks Simulation projects using OPNET. Prerequisite: CN8810.
CN8816	Elective	Master's	Network Security	This course covers the cryptographic algorithms and secure protocols, and their applications in security mechanisms for computer networks. The course introduces conventional encryption algorithms and Public Key Algorithm with integrity mechanism. Authentication mechanisms for OSI protocols and TCP/IP are also discussed, and their applications in Firewall and IDS (Intrusion Detection System) are studied using actual industrial (for example CISCO's) products. Prerequisite: CN8813.

Computer Science

Course Code	Course Type	Graduate Level	Course Title	Course Description
CP8201	Elective	Master's, PhD	Algorithms and Computability	The concepts of algorithms and computability together with techniques for analysis of the efficiency and complexity of algorithms are studied. Logical formalisms and their application in computing environments and the use of logical reasoning in establishing the correctness of implementations of algorithms are discussed. Abstract models are discussed with respect to advanced computational models.
CP8202	Elective	Master's, PhD	Advanced Software Engineering	Modern approaches to software development are studied including requirements analysis, system design techniques, formal description techniques, implementation, testing, debugging, metrics, human factors, quality assurance, cost estimation, maintenance, and tools.
CP8203	Elective	Master's, PhD	Advanced Database Systems	Object-Oriented and Object-Relational Database Systems; Distributed and Multi-database Systems; Advanced Database Applications: Web-Based Database Access, Data Warehouses.
CP8204	Elective	Master's, PhD	Advanced Programming Languages	A study of the principles, concepts, and mechanisms of computer programming languages - their syntax, semantics, and pragmatics; the processing and interpretation of computer programs; programming paradigms; and language design. Additional topics will include language design principles and models of language implementation.
CP8205	Elective	Master's, PhD	Advanced Human-Computer Interaction	Current trends in user interface technology; topics include alternative interaction devices, user interface tools, and interface modeling techniques. Usability testing and human factors.
CP8210	Elective	Master's, PhD	Topics in Data Science	This course presents concepts related to data science research activities including data management and analytics, data modeling, structured and unstructured data, regression models, social data analysis, web and data mining, information retrieval, text analysis and natural language processing.
CP8305	Elective	Master's, PhD	Knowledge Discovery	Steps in the process of knowledge discovery: data preprocessing, data mining, post-processing and knowledge utilization. Preprocessing: data

				cleaning, integration, transformation and reduction. Data mining methods: association rules, classification and clustering. Post-processing: knowledge evaluation, interpretation, presentation and visualization. Knowledge discovery and data management. Possibly other selected topics in knowledge discovery.
CP8308	Elective	Master's, PhD	Visualization	Use of computer graphics to understand patterns, relationships and trends in scientific and information systems data. Topics include: historical overview, fundamental concepts, scientific visualization techniques for scalar and vector data, visualization systems, interaction with 2D/3D graphical interfaces, web-based visualization and collaborative visualization over the internet, software visualization, information visualization.
CP8314	Elective	Master's, PhD	Advanced Artificial Intelligence	The course will focus on the theory and implementation of dynamical systems from the perspective of artificial intelligence. The emphasis will be on the compromises involved in providing useful logical representations that allow reasoning about actions to remain tractable. The course will show how these research issues are relevant for many applications beyond the traditional area of artificial intelligence.
CP8317	Elective	Master's, PhD	Performance Evaluation	Probability Theory; Transforms of probability distributions; Branching processes; Discrete time Markov Chains; Continuous time Markov Chains; Birth-Death processes; Intermediate queuing theory, M/G/1 queues; Renewal theory; Gated and limited systems; Hidden Markov model.
CP8318	Elective	Master's, PhD	Machine Learning	Machine learning is the study of algorithms that learn to perform a task from prior experience. Machine learning has a broad range of applicability, including computer vision, robotics, medical diagnosis, bioinformatics and natural language processing. This course will cover the underlying theory and practical applications of machine learning.
CP8319	Elective	Master's, PhD	Reinforcement Learning	This course focuses on topics related to reinforcement learning. The course will cover making multiple-stage decisions under uncertainty, heuristic search in planning, Markov decision processes, dynamic programming, temporal-difference learning including Q-learning, Monte Carlo reinforcement learning methods, function approximation methods, and the integration of learning and planning.

Data Science and Analytics

Course Code	Course Type	Graduate Level	Course Title	Course Description
DS8001	Required	Master's	Design of Algorithms and Programming for Massive Data	NP-completeness, approximation algorithms and parallel algorithms. Study of algorithmic techniques and To introduce students to the theory and design of algorithms to acquire and process large dimensional data. Advanced data structures, graph algorithms, and algebraic algorithms. Complexity analysis, complexity classes, and modeling frameworks that facilitate the analysis of massively large amounts of data. Introduction to information retrieval, streaming algorithms and analysis of web searches and crawls.
DS8002	Required	Master's	Machine Learning	Overview of artificial learning systems. Supervised and unsupervised learning. Statistical models. Decision trees. Clustering. Feature extraction. Artificial neural networks. Reinforcement learning. Applications to pattern recognition and data mining.
DS8003	Required	Master's	Management of Big Data and Big Data Tools	The course will discuss data management techniques for storing and analyzing very large amounts of data. The emphasis will be on columnar databases and on Map Reduce as a tool for creating parallel algorithms that can process very large amounts of data. Big Data applications, Columnar stores, distributed databases, Hadoop, Locality Sensitive Hashing (LSH), Dimensionality reduction, Data streams, unstructured data processing, NoSQL, and NewSQL.
DS8004	Required	Master's	Data Mining and Prescriptive Analytics	The course teaches to use data to recommend optimum course of action to achieve the optimum outcome and to formulate new products and services in a data driven manner. The course will cover all these issues and will illustrate the whole process by examples. Special emphasis will be given to data mining and computational techniques as well as optimization and stochastic optimization techniques. Prerequisite: DS8002

DS8006	Elective	Master's	Social Media Analytics	The course will cover fundamental concepts and tools in Social Network Analysis by showing how AI, math, and statistical methods are used to study them. The topics include: weblog analysis, centrality in social networks, influence, sentiment analysis and opinion mining, information cascades, multimedia analysis, reasoning and prediction with social media and modeling behaviour. The lab component of the class will use R or Python to develop and analyze network models. Prerequisite: DS8002
DS8007	Elective	Master's	Advanced Data Visualization	Overview of data visualization. Basic visualization design and evaluation principles. Learn to acquire, parse, and analyze large datasets. Techniques for visualizing multivariate, temporal, text-based, geospatial, hierarchical, and network/ graph data using tools such as ggplot2, R, D3, etc.
DS8008	Elective	Master's	NLP (Text Mining)	The course covers important topics in text mining including: basic natural language processing techniques, document representation, text categorization and clustering, document summarization, sentiment analysis, social network and social media analysis, probabilistic topic models and text visualization. Prerequisites: DS8002 and DS8003
DS8010	Elective	Master's	Interactive Learning in Decision Process	This course focuses on topics related to reinforcement learning. The course will cover making multiple-stage decisions under uncertainty, heuristic search in planning, Markov decision processes, dynamic programming, temporal-difference learning including Q-learning, Monte Carlo reinforcement learning methods, function approximation methods, and the integration of learning and planning. Other topics can be included as well. Prerequisites: DS 8002
DS8011	Elective	Master's	Bayesian Statistics and Machine Learning	This course will cover modern machine learning techniques from a Bayesian probabilistic perspective. Bayesian probability allows us to model and reason about all types of uncertainty. The result is a powerful, consistent framework for approaching many problems that arise in machine learning, including parameter estimation, model comparison, and decision making. We will begin with a high-level introduction to Bayesian inference, then proceed to cover more-advanced topics. Prerequisites: DS 8002

Economics

Course Code	Course Type	Graduate Level	Course Title	Course Description
EF8903	Required	Master's	Applied Econometrics	This is an introduction to estimation and inference in econometrics, in the context of the linear regression model. Estimation methods include Ordinary Least Squares (OLS), Generalized Least Squares (GLS), Instrumental Variables (IV) and Maximum Likelihood (ML). Inference will be based on test statistics from unrestricted and restricted parameter estimates. Theoretical and applied aspects of the course will be considered. Required knowledge: econometrics software packages such as TSP, EVIEWS, SAS, or STATA. 3 lecture hours + 1 tutorial hour/week.
EF8914	Elective	Master's, PhD	Financial Econometrics	The purpose of this course is an introduction to the theory and econometric techniques that are necessary to undertake empirical analysis of financial time series. Topics include univariate linear and nonlinear stochastic models such as ARMA processes, ARIMA processes, ARCH-GARCH processes, martingales and random walks. Multivariate stationary and non-stationary processes will also be examined in the context of Vector Autoregressive (VAR) models and Vector Error Correction Models (VECM) for integrated processes. Empirical application of these techniques will be done using data from the Canadian and/or international financial markets. Students of this course are expected to have a solid background in econometrics and have working knowledge of an econometrics package such as EVIEWS, TSP, Stata or SAS. Prerequisite: EF8903 or equivalent, or instructor permission.
EF8939	Elective	Master's, PhD	Topics in Econometrics	This course provides an introduction to nonparametric methods used in econometrics. Nonparametric methods are statistical techniques which do not require the researchers to specify a functional form for the function being estimated (e.g. probability density function, regression function, etc.). The primary goal of the course is to enable students to intelligently apply these methods in analyzing real-world economic issues. Prerequisite EF8903 or equivalent or instructor permission.
EF8944	Elective	Master's, PhD	Panel Data and NL Model Analysis	The first part of this course covers panel data models: static panel data models and dynamic panel data models. The second part deals with

				limited-dependent variable models in the cross-sectional setting such as discrete choice models, censored and truncated regression models and sample selection models.
EF8945	Elective	Master's, PhD	Nonparametric Data Analysis	This course provides an introduction to nonparametric methods used in econometrics. Nonparametric methods are statistical techniques which do not require the researcher to specify a particular form for the function being estimated (e.g., probability density function, regression function, etc.). The primary goal of the course is to enable students to intelligently apply these methods in analyzing real-world economic data.
EF9903	Required	PhD	Advanced Econometrics I	This course is composed of two parts. The first half of this class is to be an introduction to probability and statistical theory. The second half of this class is to be an introduction to the econometrics at graduate level. Prerequisite: EF9904 3 lecture hours + 1 tutorial hour/week. 1
EF9904	Required	PhD	Mathematical Economics	The field of economics has become more technical over the years. Macroeconomic models often involve the solution of complex dynamic optimization problems. In microeconomics, the relaxation of the assumptions of perfect information and complete markets requires the use of advanced mathematical tools that are usually not familiar to students entering the field. The objective of this course is to provide the students with the technical tools and concepts that they will use in their graduate economic courses. Topics include: linear algebra, set and measure theory, convex analysis, and optimization and fixed point theory. A significant part of the course is devoted to economic applications that illustrate how the concepts and techniques are used in the different areas of economics. These applications are designed for the students to recognize the link between mathematical and economic theory. 3 lecture hours + 1 tutorial hour/week.
EF9923	Required	PhD	Advanced Econometrics II	This course is intending for PhD students in Economics and extends the material covered in EF 8903: Econometrics I. Topics covered include instrumental variable estimation, generalized method of moments, binary response models, panel data models, time series models and quantile regression. Prerequisite: EF9903. 3 lecture hours + 1 tutorial hour/week.
EF9907	Elective	PhD	Game Theory	This course offers students a rigorous introduction to game theory, together with some of its applications to various strategic aspects in

				economics. Important concepts covered in this course include: strategic-form and extensive-form games, refinements of Nash equilibrium, epistemic foundations, repeated games, bargaining, voting, auctions and mechanism design. We also illustrate how programming. The MATLAB software package will be used to illustrate the various techniques and for completing the assignments in the course. Prerequisite: EF9904 Mathematical Economics.
EF9909	Elective	PhD	Numerical Methods in Economics	Economic models have become increasingly sophisticated in order to better capture the inherent complexities of real-world behaviour. The majority of these models however cannot be solved analytically using the standard mathematical tools of calculus and algebra. For this reason economists frequently need to resort to numerical methods. The objective of this course is to introduce students to various computational techniques and their application to economic analysis. Topics to be covered include solution of linear and nonlinear systems of equations, optimization, numerical integration and differentiation, and numerical dynamic programming. The MATLAB software package will be used to illustrate the various techniques and for completing the assignments in the course. Prerequisite: EF9904 Mathematical Economics.

Electrical and Computer Engineering

Course Code	Course Type	Graduate Level	Course Title	Course Description
EE8107	Elective	Master's, PhD	Digital Communications	The class is intended to introduce the student to the concepts and theory of digital communications. The concepts of information, channel capacity, error probability, intersymbol interference, pulse shaping and spectrum shaping and optimum filtering are discussed. Digital multiplexing and bit stuffing, encoding, scrambling, equalization and synchronization problems are studied. Regenerative repeaters, M-ary signaling systems, basic modulation techniques - ASK, PSK and FSK; and performance characteristics of digital transmission systems are considered.

EE8109	Elective	Master's, PhD	Wireless Communications I	This class provides an overview of wireless communications systems and fundamental analysis and design techniques. The class introduces cellular system, channel characterization for propagation losses, fading, and interference. Coding, modulation, and advanced transceiver design issues are examined. Modern mobile wireless communication system applications are reviewed.
EE8120	Elective	Master's, PhD	Applied Optimization Techniques	This course covers the following topics: Linear and nonlinear programming, unconstrained optimization techniques such as gradient techniques (steepest descent, conjugate gradient, Newton-Raphson) and constrained optimization techniques such as Lagrange multiplier, quadratic and dynamic programming, least square techniques, integer and mixed-integer programming. NP-complete problems: branch-and-bound as well as heuristic algorithms, graph colouring, partitioning, and maximum matching. Bounds, variable priorities, special ordered sets and search algorithms (random search, binary search, genetic algorithms, and tabu search). Optimization algorithms in Electrical and Computer Engineering areas will be discussed in depth.
EE8209	Elective	Master's, PhD	Intelligent Systems	This course introduces the fundamental practice and underlying principles involved in the study of intelligent systems. The emphasis of the course is on a practical approach to problem solving and learning processes in the context of neural networks. In addition to theoretical, mathematical, and implementation of such systems students will get exposure to some of the popular intelligent systems tools. Applications in signal processing, pattern recognition and vision will be considered. Antirequisite: ELE888
EE8204	Elective	Master's, PhD	Neural Networks	The class deals with preliminaries of artificial neural systems including fundamental concepts and models. Single layer perception classifiers and multi-layer feed forward networks, single-layer feedback networks, and associative memories are covered.
EE8214	Elective	Master's, PhD	Computer Systems Modeling	The objectives of this course are to study the characteristics of various analytical models of computer systems and to learn how to apply those models to analyze system performance and dependability. The modeling techniques to be covered include Poisson, renewal, Markov processes, fault trees, Petri nets and queuing networks. Examples include models of computer systems, computer networks, and wireless systems.

EE8301	Elective	Master's, PhD	Linear System Theory	The main thrust of the class is to introduce an algebraic unification of finite-dimensional linear systems with emphasis on continuous and discrete dynamic systems, using an operator theoretic approach. Topics covered include transition matrices, functions of matrices, adjoint systems, weighing patterns, realizability; canonical forms; stability, minimal realization; minimum norm, and approximation problems
ES9002	Required	Master's	Research Methods: Env App Sc and Mgt	This seminar course involves study and application of methods appropriate to research in the environmental sciences and environmental management studies. It focuses on the challenges of engaging in research in a multi-disciplinary environment where students examine the conventions of research in their study areas. The purpose is to enable students to identify valid questions open to research and to introduce the methods needed to answer the question in ways that are unambiguous and supportable. 1 Cred

Mathematics

Course Code	Course Type	Graduate Level	Course Title	Course Description
AM8001	Foundation Course	Master's, PhD	Analysis and Probability	Topics to be covered will be taken from the following list: metric spaces, Banach and Hilbert Spaces, measure spaces, integration, functional spaces and operators, random variables and conditional expectation; modes of convergence, discrete time martingales and filtrations; Brownian motion, continuous time stochastic processes and martingales; stochastic calculus
AM8002	Foundation Course	Master's, PhD	Discrete Mathematics and its Applications	Selected topics from discrete mathematics: graph isomorphisms and homomorphisms; Ramsey theory, random graphs; infinite graphs; automorphism groups; graph searching games (such as Cops and Robbers); Steiner triple systems; graph decompositions; Latin squares; finite fields; polynomial rings; finite projective and affine planes.
AM8101	Required	Master's	Principles and Techniques in Applied Math	Asymptotic Expansions; Perturbation Methods; Eigenfunction Expansions; Integral Transforms; Discrete Fourier Transforms.

AM8102	Required	Master's	Advanced Numerical Analysis	Numerical methods; numerical linear algebra; numerical methods for ODEs; numerical methods for PDEs.
AM8201	Elective	Master's, PhD	Financial Mathematics	This course covers the fundamentals of mathematical methods in finance. After providing a background in Stochastic Calculus, it considers the study of financial derivatives. Fixed income instruments, derivative pricing in discrete and continuous time, including Black-Scholes formulation, American and Exotic options are considered. Elements of Portfolio Management and Capital Asset Pricing Model are also taken into account.
AM8204	Elective	Master's, PhD	Topics in Discrete Mathematics	Selected advanced topics from discrete mathematics: random graphs; models of complex networks; homomorphisms and constraint satisfaction; adjacency properties; Ramsey theory; graph searching games; Latin squares; designs, coverings, arrays, and their applications.
AM8205	Elective	Master's, PhD	Applied Statistical Methods	This course covers a wide variety of statistical methods with application in medicine, engineering, and economics. Exploratory data analysis. Parametric probability distributions. Sampling and experimental designs. Estimation, confidence intervals and tests of hypothesis. Analysis of variance. Multiple regression analysis, tests for normality. Nonparametric statistics. Statistical analysis of time series; ARMA and GARCH processes. Practical techniques for the analysis of multivariate data; principal components, factor analysis.
AM8206	Elective	Master's, PhD	Partial Differential Equations	Topics to be covered will be taken from the following list: Derivation of equations from conservation laws; First-order Equations and the Method of Characteristics; Weak Solutions; Hyperbolic Systems; Diffusion and Reaction-Diffusion Equations; Traveling Wave Solutions; Elliptic Equations.
AM8211	Elective	Master's, PhD	Operations Research	Nonlinear Programming, Decision Making, Inventory Models, Markov Chains, Queuing Theory, Dynamic Programming, Simulation. Antirequisite: MTH603
AM8213	Elective	Master's, PhD	Financial Mathematics II	The course covers fixed income derivatives and the quantitative aspects of risk and portfolio management in modern finance. It introduces single factor interest rate models and pricing and covers analysis of risk measures and their properties, market, credit risk and an overview of other types of risks. The course also develops portfolio optimization techniques. Case studies and preparation for financial certification programs (FRM and PRM) are also included. Antirequisite: MTH800

AM8214	Elective	Master's, PhD	Computational Complexity	Order of Growth notation, time and space complexities of DTMs and NDTMs, intractability, basic complexity classes, P=NP?, reducibility and completeness, NP-completeness, Cook's theorem, hierarchy results, circuit complexity, probabilistic algorithms, models for parallel computation. Antirequisite: MTH814
AM9001	Elective	Master's, PhD	Advanced Topics in Discrete Mathematics	A selection of topics from Discrete Mathematics: probabilistic method, random graph models such as binomial random graphs and random regular graphs; models of complex networks such as preferential attachment, ranking, geometric, and copying models; graph searching problems such as Cops and Robbers games, graph cleaning, and firefighting; designs, coverings, arrays, and their applications; homomorphisms and constraint satisfaction problems; combinatorial optimization problems on graphs and approximation algorithms.
AM9002	Elective	Master's, PhD	Advanced Topics in Financial Mathematics	A selection of topics from the following topics in Financial Mathematics: Arbitrage pricing. Completeness and Hedging. The Martingale Approach to Arbitrage. Incomplete Markets. Exotic Derivatives. Interest Rate Models. Stochastic calculus for general semi-martingales. Levy processes. Advanced portfolio risk management. Dynamic risk measures. Advanced Credit Risk Models.

Mechanical and Industrial Engineering

Course Code	Course Type	Graduate Level	Course Title	Course Description
ME8118	Elective	Master's, PhD	Information Systems Analysis and Design	The foundations that underlie the development of information systems are presented. The concepts, strategies, techniques, and tools for identifying and specifying information systems requirements and for developing designs are covered. A major analysis and design project is required.
ME8120	Elective	Master's, PhD	Introduction to Operations Research	This class is a graduate level introduction to the fundamental ideas of operations research. The class focuses on mathematical modelling in deterministic and non-deterministic settings. The class covers topics in the theory and application of mathematical optimization, network analysis, decision theory, inventory theory, and stochastic processes including

				queuing processes. The class requires background in probability theory and linear algebra as well as some skills in computer programming.
ME8127	Elective	Master's, PhD	Optimization Models	This course is intended to give a broad treatment of the subject of practical optimization. Emphasis will be given to understanding the motivations and scope of various optimization techniques for constrained and unconstrained problems. Linear, nonlinear and combinatorial optimization problems with roughly equal emphasis on model formulation and solution techniques. Modelling emphasis is primarily on deterministic formulation of real world applications. Selected solution techniques for each type of problem will be discussed.
ME8128	Elective	Master's, PhD	Prob. Models in Operations Research	This course presents the formulation and analysis of probabilistic models in operations research. Topics to be covered include Poisson processes, renewal processes, Markov chains, queuing theory, Markovian decision processes, and time series analysis. Application areas include reliability, traffic flows, production, and inventory.
ME8137	Elective	Master's, PhD	Advanced Systems Control	Overview of classical controls and introduction to modern control theory. Control system modeling and analysis in state space. System controllability and observability. Pole placement control design. State observers. Introduction to nonlinear control systems. Fundamentals of Lyapunov theory. Lyapunov's direct method. System linearization. Adaptive control. Antirequisite: AE8137.
ME8140	Elective	Master's, PhD	Simulation Theory & Methodology	This course introduces simulation as a problem solving tool. Mathematical foundations: random variate generation, parameter estimation, confidence interval, simulation algorithm, Monte-Carlo simulation techniques and simulation languages. Examples: computers and protocols, urban traffic, harbours and airport capacity planning, manufacturing capacity planning, inventory systems. Antirequisite: EN8912
ME8144	Elective	Master's, PhD	Advanced Reliability Modelling	This course is designed to provide graduate students with a complete overview of reliability programs, including the surveillance and control program, the design and evaluation program, and the development and production reliability test. The course presents evaluation techniques and optimal reliability system design for many system structures. It also includes recent results and comprehensive fuzzy and stochastic algorithms,

				cause analysis, risk analysis, asset management, and application of artificial intelligence in reliability, maintainability, and availability.
ME8201	Elective	Master's, PhD	Design of Algorithms and Programming for Massive Data	NP-completeness, approximation algorithms and parallel algorithms. Study of algorithmic techniques and to introduce students to the theory and design of algorithms to acquire and process large dimensional data. Advanced data structures, graph algorithms, and algebraic algorithms. Complexity analysis, complexity classes, and modeling frameworks that facilitate the analysis of massively large amounts of data. Introduction to information retrieval, streaming algorithms and analysis of web searches and crawls. Antirequisite: DS8001.
ME8202	Elective	Master's, PhD	Machine Learning	Overview of artificial learning systems. Supervised and unsupervised learning. Statistical models. Decision trees. Clustering. Feature extraction. Artificial neural networks. Reinforcement learning. Applications to pattern recognition and data mining. Antirequisite: DS8002.
ME8203	Elective	Master's, PhD	Management of Big Data and Big Data Tools	The course will discuss data management techniques for storing and analyzing very large amounts of data. The emphasis will be on columnar databases and on Map Reduce as a tool for creating parallel algorithms that can process very large amounts of data. Big Data applications, Columnar stores, distributed databases, Hadoop, Locality Sensitive Hashing (LSH), Dimensionality reduction, Data streams, unstructured data processing, NoSQL, and NewSQL. Antirequisite: DS8003.
ME8204	Elective	Master's, PhD	Data Mining and Prescriptive Analytics	The course teaches to use data to recommend optimum course of action to achieve the optimum outcome and to formulate new products and services in a data driven manner. The course will cover all these issues and will illustrate the whole process by examples. Special emphasis will be given to data mining and computational techniques as well as optimization and stochastic optimization techniques. Prerequisite: ME8202. Antirequisite: DS8004.

Philosophy

Course Code	Course Type	Graduate Level	Course Title	Course Description
PH8101	Elective	Master's	Epistemology	This course is a study of what canonical and contemporary philosophers have said about several central problems in the theory of knowledge. Topics may include: theories of justification; skepticism; the limits of belief and knowledge; perception, intuition and other sources of evidence; the social construction of knowledge; science and pseudo-science; a priori and a posteriori knowledge; knowledge of mathematical truths.

Policy Studies

Course Code	Course Type	Graduate Level	Course Title	Course Description
PD9000	Elective	PhD	Policy Analysis	This course is designed to provide students with a foundational understanding of the state and societal processes, institutions, actors, ideas and relations which coalesce in the development and understanding of public policy. The course covers how and where policy is made, as well as, how and where policy is analyzed. It introduces the disciplinary and interdisciplinary foundations of policy analysis.

Psychology

Course Code	Course Type	Graduate Level	Course Title	Course Description
PS8517	Elective	Master's, PhD	Psychometric Theory and Research	This course focuses on measurement theory, scale construction, item response theory, and the interpretation of related issues. Topics covered include psychometric scaling methods, exploratory and confirmatory factor analysis, reliability analysis, test interpretation, measurement of change, and issues pertaining to the analysis of quantitative experimental and nonexperimental data.

PS8527	Elective	Master's, PhD	Computational Methods in Psychology	This course introduces students to computational methods in use within perceptual, cognitive and brain sciences. Topics include signal processing, stimulus control, psychophysiology (GSR, EMG, HR, RR, EEG/ERP), data filtering, and data reduction. Each topic will be introduced using examples from the literature and will be explored using a combination of theory and application. The course is designed to be of use for students with or without prior programming experience.
PS8528	Elective	Master's, PhD	Systematic Meta-Analytic Reviews	Empirical evidence in psychology and related disciplines is burgeoning at a rate that threatens our ability to assimilate it. For this reason, there is a growing emphasis on literature syntheses that integrate available information comprehensively, critically, and without bias. In this course, students will learn two such methods, systematic review and meta-analysis. Students will learn to identify, appraise, and synthesize research evidence both qualitatively and quantitatively. Prerequisite: PS8101 and PS8102.
PS8533	Elective	Master's, PhD	Program Evaluation	The course will provide knowledge and practice in the current methods for evaluating programs and services. Topics include: logic models; ethical issues; measurement of processes and outcomes; instrument development and selection; budgeting; data collection; analysis; and reporting and dissemination. Students will gain hands-on skills in needs assessment, process evaluation and outcome evaluation through service learning projects conducted in collaboration with local community organizations.

Spatial Analysis

Course Code	Course Type	Graduate Level	Course Title	Course Description
SA8901	Elective	Master's	Geospatial Data Analytics	Spatial analysis is characterized by large data volumes and an increasing number of data sources, as most government and business databases include geographic references. This course provides an introduction to geospatial data representation and integration in Geographic Information Systems (GIS). Students gain hands-on experience mapping and analysing real-world datasets, from open government data and the Census to environmental measurements and geolocated social media.

SA8902	Required	Master's	Database Management and Spatial Technologies	This course focuses on the core principles of Relational Database Management Systems (RDBMS) and the incorporation of spatial data storage and analytic tools. The course takes an applied approach with extensive use of RDBMS software and business intelligence tools with advanced spatial functionality. Students create entity-relationship models and convert them into GIS-ready spatial databases that make use of techniques such as spatial SQL and spatial indexes.
SA8903	Required	Master's	Applied Spatial Statistics	This course explores the use of various types of spatial statistical analysis. It involves the application and critical assessment of the use of selected univariate and multivariate modeling approaches in the analysis of geospatial data. Specific topics include spatial autocorrelation, the modifiable areal unit problem, spatial interaction modeling, spatial regression, and identification and interpretation of spatial clusters.
SA8905	Required	Master's	Cartography and Geovisualizatn	The course introduces cartographic principles and their application to the design of thematic maps using Geographic Information Systems (GIS). Textbooks and lectures introduce the fundamental elements of artographic design, different approaches to data representation, and novel map types. The role of maps at different stages of spatial analysis is examined. Students will gain hands-on experience with GIS and statistical software through lab assignments that involve data exploration, analysis, and cartographic presentation.
SA8911	Elective	Master's	Geodemographics	This course surveys practical, conceptual, and methodological issues associated with the application of spatial techniques to marketing and segmentation. Stress is given to the use of a range of socioeconomic and demographic variables. Methods include multivariate techniques for market definition and segmentation, focusing on applications of cluster analysis. The course also addresses the management issues in the use of geodemographics and related spatial analysis within public and private sector decision-making.
SA8912	Elective	Master's	Spatial Technology in Strategic Planning	The course examines the application of spatial technologies, particularly GIS, to strategic planning issues that affect the commercial sector of the economy. The focus is on analysis of retail and service activities from the perspective of both the private and public sector policy makers. Specific issues include: spatial impact analyses, use of GIS as a corporate

				management system, retail and services network planning, and location-allocation modeling. The course will adopt a variety of presentation formats including lectures, seminars and laboratory sessions.
SS8000	Elective	Master's	Stat Analysis in Social Science Research	This course introduces students to advanced quantitative methods for generating and analyzing large social science data sets such as those produced by Statistics Canada and other national and international statistics bureaus. Following a review of basic statistics and probability, the course will cover topics such as the linear probability model, logistic regression, models for categorical and count data and factor analysis. The substantive questions and particular data sets to which these tools will be applied will be driven by student interests. While students will gain knowledge of statistical theory, special attention will be paid to the practice of carrying out analysis of complex data. For example, issues related to coding, missing data and the reporting and presentation of quantitative results will be covered.
SS8001	Elective	Master's	SS8001 Advanced Qualitative Methods	This course is specifically targeted at students who want to learn advanced qualitative research methods related to their MRPs, theses or dissertation projects. It will provide advanced understanding and analysis of qualitative research and methods. This course offers an opportunity to customize learning on various qualitative research methods directly related to graduate research projects.

Urban Development

Course Code	Course Type	Graduate Level	Course Title	Course Description
PL8309	Elective	Master's	Urban Investments	The course examines urban investment strategies that integrate market-based solutions into the urban development process to promote local and regional planning objectives. Real estate investment terminology, data, financial analysis techniques and spreadsheet-sheet based applications are covered to learn about the feasibility analysis process associated with income-property investments. Case studies, in-class exercises, lectures and guest speakers provide the opportunity to address contemporary urban development issues. Antirequisite: PLE635

Yeates School of Graduate Studies

Response from YSGS on the Peer Review Report for the Proposed Graduate Program: Management (PhD)

Dr. Cory Searcy, Interim Vice-Provost & Dean, YSGS
August 22, 2019

The Peer Review Team (PRT) for the proposed PhD in Management consisted of Dr. Jeffrey Parsons (Memorial University of Newfoundland), Dr. Giovani da Silveira (University of Calgary), and Dr. Mohamed Wahab Mohamed Ismail (Ryerson University).

The PRT site visit was conducted on May 22 and 23, 2019. The PRT report was communicated to the Interim Vice-Provost and Dean, YSGS on June 13, 2019, and the response to the report from the Ted Rogers School of Management (TRSM) was communicated on August 7, 2019.

The PRT cited several strengths of the proposed PhD in their report, including the program's alignment with the institutional mission and academic plans, alignment of the proposed specializations with the University strategic mandate agreement, and the expertise of faculty and research areas. The PRT report includes several recommendations, which are discussed below.

As mandated by Ryerson Senate Policy 112, what follows is the YSGS-level response to both the PRT report, and the TRSM responses to the report. Note that this proposal is for a Faculty-wide PhD program; there is, therefore, no separation between the response from the program and the Faculty. We summarize below the recommendations and responses. We divide recommendations into two broad categories: academic and administrative/financial.

The role of YSGS is to provide direct commentary on academic matters, while making suggestions for administrative or financial matters. For simplicity, we supply our responses (as well as a recap of the PRT recommendations and program responses) in the form of tables.

ACADEMIC RECOMMENDATIONS

Recommendation	Program and TRSM Faculty Response	YSGS Response
1. Revise course requirements. • All students should be required to take an additional research methods course. The specific additional course can vary between specializations, depending on the need.	Students will be required to take nine courses, and the number of additional required courses will be determined by the Supervisory Committee. Following admission to the PhD in Management, the Supervisor/Supervisory Committee will determine (based upon students' academic background and interests) if additional coursework is required. Applicants must have demonstrated knowledge of research methods prior to applying, as evidenced in their transcripts. If this knowledge is not evident, applicants must successfully complete a research methods coursework equivalent to SM8103 and SM8104 (Research Methods courses in the Master of Science in Management program). Students have access to advanced doctoral methods and theory courses that are offered across the University. TRSM will work with other faculties to cross-list courses and avoid duplication.	YSGS supports the program response. YSGS further notes that if the program decides to make changes to its curriculum in the future, those changes must be made in accordance with Ryerson University Policy 127. If the program contemplates curriculum changes in the future, YSGS encourages the program to consult with the Associate Dean, Graduate Programs in TRSM and the Associate Dean, Programs in YSGS on any potential curriculum changes.
• Consider offering a course on Philosophy of Science and/or Theory Development in the first year for all specializations.	The number of courses may vary according to the student's particular program and background. Students work closely with their research-active supervisors who help guide them to the appropriate courses within and outside the School. If the Supervisor/Supervisory Committee deems it necessary for the student to take a Philosophy of Science and/or Theory Development in the first year, with the Graduate Program Director's approval, the student may take it from a program internal or external to Ryerson University. Further details on TRSM's response are available on pages 4-6 of the program's response to the PRT.	

Recommendation	Program and TRSM Faculty Response	YSGS Response
2. Develop a proposal to introduce a Doctor of Business Administration program for students looking at careers in business management rather than in public/private research or academia.	Taking its direction from TRSM Faculty Council, the Ad hoc Committee on Doctoral Program Feasibility presented an analysis of the merits of both a PhD and DBA program at the February 8, 2017 meeting of Faculty Council. Based upon feedback solicited, it was suggested that the DBA is a lesser known credential in Canada and that a DBA must be applied in nature where as a PhD could be both. The committee presented that a PhD would best serve the needs of the Faculty, provide the most flexibility for entering either academic or professional research careers and be most recognized. Further details on TRSM's response are available on page 10 of the program's response to the PRT.	YSGS supports the program response. YSGS agrees that a PhD best serves the needs of the Faculty and students.
3. Offer Directed Reading courses in lieu of elective (or any other course) only when there are fewer than three (rather than five) students enrolled.	We agree with the recommendation. Although the School recognizes that some specialization electives may attract fewer students, the goal is to minimize the number of very small courses without damaging the scope and variety of the program. When pre-term registration data shows that a class is unlikely to make the approved minimum, the class may either be cancelled or written requests for the continuation (with reasons stated) will be sent to the to the Dean prior to the beginning of the term in which the course is to be offered. The minimum of five students was established in consultation with the Dean and the Dean is prepared to revisit the enrolment threshold if necessary. Further details on TRSM's response are available on pages 10 and 11 of the program's response to the PRT.	YSGS supports the program response. YSGS agrees that courses with very low enrolments should not be regularly offered and should only be considered on a case-by-case basis.

ADMINISTRATIVE AND FINANCIAL RECOMMENDATIONS

Recommendation	Program and TRSM Faculty Response	YSGS Response
4. Focus on one or two specializations for the initial intake to build a minimum-sized "cohort" of students in	Will look at ways to admit more students.	YSGS notes that additional spaces are subject to discussion between the program, YSGS, the University Planning Office, and the Provost. YSGS supports the program's advocacy for

each specialization ($n \geq 3$) and allow the offering of the respective specialization courses.	Initially, an enrolment of approximately six students (full-time equivalent or FTE) per year was anticipated, TRSM will advocate for additional spaces. Our sizeable MScM could also be a feeder into the PhD program. Central to this effort to increase our PhD student intake are (1) funding for PhD student scholarships and research support, (2) promotion of the PhD program, and (3) a dedicated staff member who, with the guidance of the Dean and Program Director, will design and implement a master plan of coordinated recruiting for all specializations. Further details on TRSM's response are available on pages 1 and 2 of the program's response to the PRT.	additional spaces, but notes that the allocation of additional spaces is not in its purview alone. YSGS supports the program's efforts with respect to funding, promotion of the program, and a dedicated staff member. YSGS notes that funding for the dedicated staff member will need to come from TRSM.
5. Develop clearer admission criteria: • Require a GMAT/GRE minimum score (with limited and clearly specified exceptions).	To gain admission to proposed PhD in Management, applicants are expected to take a Graduate Management Admission Test (GMAT) and/or a Graduate Record Examinations (GRE). Upon reviewing the admission requirements of 22 PhD in Management programs across Canada, 18 institutions require a GMAT/GRE; 6 of which do not explicitly state a minimum score. Although the proposed PhD in Management will have no established minimum score for the GMAT and/or GRE, test results will be an important part of applicants' profile. Consideration of a GMAT and/or GRE waiver is also an option for applicants but is at the discretion of the Program Director and only if the applicant can provide sufficient evidence of academic ability.	YSGS supports the program response. YSGS agrees there may be reasonable circumstances under which the requirement for a GMAT and/or GRE is waived. This will require the support of the program. YSGS notes, however, that final approval for all exemptions is at the discretion of the Vice-Provost and Dean of YSGS. YSGS supports the program's decision to use interviews, supported by an interview guide, as a part of the admissions process.

• During student interviews, search for explicit evidence of an applicant's interest to develop and publish research that is original, high in quality, and relevant for the specialization field. • Develop an "interview guide" to better coordinate with and support potential supervisors as they interview student candidates. The guide should indicate what minimum aspects and criteria should be explored in the interviews.	Once a candidate has been deemed academically capable of doing a PhD, the next step will be an interview. We appreciate the PRT recommendation and suggestions related to assessing applicant eligibility during the interview process. There are no hard-and-fast rules for selecting the right candidate, but there are some general competences that an 'ideal' candidate will have as suggested by the PRT and include: • Be prepared to talk about their research interests in detail • Be prepared to discuss motivation for pursuing a PhD • Show evidence that they have reviewed potential supervisor's work • Demonstrated familiarity with current scholarship in the field A selection guide will be developed for admission committee members and will provide potential supervisors a resource from which to select questions that will help identify the candidate who will be most successful in the program. An interview guide will provide lists of questions or issues that are to be explored in the course of an interview. The interview guide will also serve as a checklist during the interview to make sure that all relevant questions are covered. Further details on TRSM's response are available on pages 2 - 4 of the program's response to the PRT.	
6. Develop clear processes for managing student funding including scholarships, grants and other awards. Ensure the PhD program website makes clear that part-time students are not funded.	As referenced on the Ryerson University website, the University provides financial support in the form of scholarships, awards or assistantships for as many full-time students as possible. Scholarships and awards are offered on a competitive basis. Working with the Program Director and directing students to YSGS website resources, PhD candidates will be encouraged to apply for external funding and awards, including support from the Government of Canada, national foundations, and the Province of Ontario. Information sessions and workshops hosted within TRSM and by YSGS will be offered throughout the academic year. Given that the students have the potential to propose research that is fundable from the three grant councils it is important that the School	YSGS supports the program's response. YSGS agrees that it is essential that clear processes for managing student funding are established. The fact that part-time students will not be funded must be made clear to all applicants. YSGS also stresses the importance of a competitive funding package for all full-time students. Strong support from TRSM, as well as through faculty stipends, will be essential.

	identify, early after approval, faculty members who can serve as mentors. Funding support would be a multi-pronged approach that includes: internal and external fellowships and scholarships, teaching assistantships, graduate assistantships, and research stipends and assistantships. Eligible domestic students admitted to study full time would receive a minimum of $25,000 a year for up to four years composed of a combination of these sources. Further details on TRSM's response are available on pages 6 - 7 of the program's response to the PRT.	
7. Develop a process to handle issues with PhD students (e.g., switching Ph.D. thesis supervisor).	The University provides guidelines on the roles of the supervisor and the graduate student. TRSM recognizes that it is incumbent on the Faculty and University to do everything possible to provide guidance in how to maximize the likelihood of excellent supervision. The Yeates School of Graduate Studies (YSGS) is charged with the responsibility of providing that guidance for the University graduate community. YSGS provides policies and general guidelines that inform "best practices," for students and supervisors. These Guidelines provide direction on choosing a supervisor, establishing a supervisory committee, and maintaining a productive working relationship among all three. They point to the respective responsibilities of students, supervisors, and graduate units (departments, centres, and institutes). They also provide advice on reducing and solving problems that may arise. A "Student-supervisor discussion checklist" and "Graduate Supervision Guidelines" documents can be found on the YSGS website. TRSM will develop its internal operation manual to articulate and concretize the processes of addressing various issues, including students, under the policy framework of the Yeates School of Graduate Studies (YSGS) and the University. Further details on TRSM's response are available on pages 7-8 of the program's response to the PRT.	YSGS supports the program response. YSGS further notes that requirements for supervisors and supervisory committees are specified in Ryerson University Policy 164.

8. Develop guidelines for writing two different types of PhD thesis (monograph versus manuscript-based).	We appreciate the recommendation. Whether a candidate chooses a manuscript-based thesis or a traditional thesis, it's important that the document is consistent in both form and style. As an alternative to the traditional thesis format, a manuscript-style thesis consists of a collection of papers of which the student is an author or co-author. At the suggestion of the PRT to develop guidelines for the writing of different types of PhD thesis, TRSM reviewed a number of websites from Canadian Universities. In addition to the formatting guidance offered internally by YSGS, we are prepared to create an expanded internal document for supporting faculty and students. A student's dissertation must be prepared and submitted in strict accordance with procedures outlined by the Yeates School of Graduate Studies (YSGS) and for dissertations, with the current regulations of the Library and Archives Canada. Students will be made aware that the responsibility for formatting and submitting the correct format rests with the author. To help students prepare and submit their dissertation in accordance with proper procedures, YSGS has developed a guide for graduate student use. This guide can be found on the YSGS website. Further details on TRSM's response are available on pages 8-9 of the program's response to the PRT.	YSGS supports the program response. YSGS notes that programs are permitted to develop program-specific guidelines for traditional and manuscript-based theses, provided those guidelines do not conflict with the YSGS guidelines and are in accordance with Ryerson University Policy 164.
9. Acquire additional library electronic resources and journal subscriptions as indicated (see Appendices 3 and 4 of the Proposal "Library Response"). In particular, we recommend subscribing to the Business Source Complete database and to the Marketing Science journal (if this is not included in the new database).	We strongly support the acquisition of electronic resources and journals to support the proposed program (value: $130,000 per year). We are committed to working with the Chief Librarian, Content Librarian, TRSM Dean, and YSGS, during the early years of the program implementation, to continuing to enhance the library collection to support the PhD in Management. Further details on TRSM's response are available on page 9 of the program's response to the PRT.	YSGS supports the program response and supports its advocacy for additional library resources. YSGS notes, however, that decisions related to library support and acquisitions are beyond its purview. YSGS encourages that program to work with the Dean of TRSM and the Chief Librarian to ensure adequate library resources are available to support the program.

In conclusion, we thank the external reviewers and colleagues in TRSM for a very thorough assessment of the strengths and challenges of the proposed PhD in Management. The PRT recommendations and the TRSM responses raise important points regarding the program, and the discussion of these will only have a positive development in the evolution of the program.

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