REPORT OF ACADEMIC STANDARDS COMMITTEE
Report #W2021–3; April 2021

In this report the Academic Standards Committee (ASC) brings to Senate its evaluation and recommendation on the following items:
- **CHANG SCHOOL – Certificate Review for Emergency Management and Response Planning**
- **CHANG SCHOOL – Certificate Modifications to Emergency Management and Response Planning**
- **CHANG SCHOOL – Certificate Discontinuation for Fashion Coordination and Styling**
- **CHANG SCHOOL – Certificate Discontinuation for Financial Planning**
- **CHANG SCHOOL – Certificate Discontinuation for Media Writing Fundamentals**
- **CHANG SCHOOL – Certificate Discontinuation for News Studies**
- **NEW INTERDISCIPLINARY MINOR – Innovation and Zone Learning**
- *For Information:* **CHANG SCHOOL CERTIFICATES – Revisions (December 2020; February 2021)**

A. CHANG SCHOOL – Certificate Review for Emergency Management and Response Planning
Since Fall 2012, the Department of Computer Science, in collaboration with The Chang School, has offered the six-course Certificate in Emergency Management and Response Planning for adult professionals. To date, a total of 361 candidates have enrolled in the Certificate, and by Spring/Summer 2020, 71 students have graduated from the current Certificate. Out of the 69 certificate programs offered at The Chang School, the Certificate in Emergency Management and Response Planning is 15th in terms of highest enrollment.

There is a large and growing need for trained professionals to understand and work within the extreme constraints and difficulties associated with disasters and emergencies. Urban emergencies such as the Toronto Blackout of 2003, the Toronto Ice Storm of December 2013 and the Fort McMurray Fire of 2016, and the global threat of COVID-19 in 2019, have reconfirmed the local and national need for university-level Emergency Management, Threat and Response Planning career-oriented credentials such as certificates.

This fully online certificate program may be taken anywhere in the world by those aspiring to, or currently working internationally, to be first and second responders, while also providing the necessary skills for communities to work proactively to prepare for, prevent and reduce the effects of disasters. The certificate is designed to solidify professional knowledge to help communities build resiliency and reduce emergencies worldwide and locally. It is also intended to provide participants with the capacity to anticipate and develop the necessary strategies to minimize the impact of local and global threats and emergencies before and after they happen. An entire course is devoted to risk and continuity management.

Participants in this certificate, both domestic and international, are able to complete this program online - allowing them to interact via online course discussion boards, with each other across geographic and jurisdictional boundaries.

The revised goals of this program are:

1. Mastery of both theory and best practices in the pillars of Emergency Management Prevention, Mitigation, Preparedness, Response, Recovery, Emergency and Continuity Management functions.
2. Profession-centric capacities to handle the diversity and complexity of the Emergency Management as they pertain to threats and response planning in emergencies and the Business Continuity field.
3. A sound and relevant skill set and overall mid- to high-level managerial competencies relevant to the field.

Learning Objectives – By the end of the certificate program, successful students will be able to:

1. Define and explain concepts, principles and terms associated with the functional knowledge, applied expertise and delivery of emergency management in an organizational environment, including local and international incidents.

2. Manage and execute emergency and threat response, recovery operations, resiliency, business continuity and continuity of delivery in real-world environments.

3. Organize and lead the elements of critical incident response within an organization or government entity. Recognize the scope of authority for the various types of emergency incidents and the appropriate emergency response to undertake.

4. Perform assessment and audit, including mastery of preparing emergency system response plans, including operations and analysis of events related to emergency incidents with consideration of implications for communities and emergency operations.

5. Develop the ability to interpret, appraise and inform evidence-based decision-making that is based on principles, applied actionings, planning and recovery frameworks and scenarios of disaster and emergency management efforts globally with consideration of anomalies, risks (e.g. climate change), consequences, and pandemic planning.

The certificate learning outcomes are similar to learning outcomes from other comparator programs offered at other institutions. This means that we are well within the norm for this type of education and, given the burgeoning need for such training, no changes need to be made. It should be noted that because our certificate offerings are fully online and flexible they address the issue of shift work which often is a barrier to entry for people working in, or aspiring to work in, this field.

Certificate Structure - The Certificate in Emergency Management and Response Planning currently consists of five (5) required courses and one (1) elective course. All courses are available in both in-class and online format. Students may enter the program at the beginning of any of the three semesters. There are no pre-requisites required for any course.

Required Courses:
- CSCI 232 Incident and Operations Management
- CSCI 234 Analysis of Critical Incidents
- CSCI 241 Planning for Emergency Management
- CSCI 243 Continuity and Risk Management
- CKDM 160 Emerging Issues

One (1) of the following Elective Courses:
- CDCM 125 Disaster and Emergency Incident Communications
- CKDM 105 Project Management in Disaster Recovery
- CKDM 110 Law of Disaster and Emergency Management
- CKDM 115 Intl Policies and Disaster Coordination

- CSCI 230 Emergency Management Practice

Student Surveys - A phone survey of twenty continuing education active certificate candidates in the existing certificate was carried out in June 2020. Key findings suggest that predominant enrollment drivers for emergency management and response planning courses and the existing certificate program are to master job-relevant applied and analytical skills to advance into an increasing number of managerial roles and careers in the emergency management field all sectors. The reason given for pursuing this certificate is to acquire the university credential necessary to work in the emergency management field at the municipal, provincial, federal, national and international levels.

All of the students surveyed are planning to complete the existing certificate. All expressed that their expectations had been fully met.

The appetite for a new four-course certificate (instead of the current six-course certificate) is strong. Students suggest that the CKDM160 Emerging Issues Capstone course be removed from the certificate and fold in all emergent issues into the proposed certificate's four courses due to personal time constraints. In addition, they suggested that all the electives be deleted but that the CSCI130 elective become one of the required courses in the new, proposed, four-course Certificate. Most in-demand, new topics of interest identified and that will be added to all four required courses in the proposed certificate are: public health threats and response planning and urban and community resilience.

Developmental Plan - In 2020, the Certificate Curriculum Committee, the Certificate Program Advisory Council and Academic Home Department Chair approved the certificate review and that a revised certificate in Emergency **Management, Threat and Response Planning** be proposed, to consist of four degree credit courses. Ryerson's proven track record makes it ideally poised to offer the new four-course, degree credit, fully online certificate to provide the expertise mastery that specialized talent needs in today's society facing an increasing number of threats and emergencies, and to target professional talent who are currently under-employed, mal-employed or unemployed to participate in labour market transformations involving emergency response planning. It is recommended the new certificate be approved to commence delivery in Fall 2021.

Recommendation
Having satisfied itself of the merit of this certificate review, the Academic Standards Committee recommends:
That Senate approve the certificate review for Emergency Management and Response Planning – Chang School.

B. CHANG SCHOOL – Certificate Modifications to Emergency Management and Response Planning
Introduction - As a result of the review of the Certificate in Emergency Management and Response Planning, we are proposing that the certificate requirements change from a six-course certificate to a four-course certificate. This change to the certificate curriculum is to enhance the students' ability to complete the certificate while meeting the certificate's learning objectives.

Accordingly, six courses in the Certificate in Emergency Management and Response Planning are being deleted. It is also proposed that the Certificate in Emergency Management and Response Planning be renamed to the Certificate in Emergency Management, Threat and Response Planning.

Deleted Courses -
CDCM 125 Disaster and Emergency Incident Communications (elective)
CKDM 105 Project Management in Disaster Recovery (elective)

CKDM 110 Law of Disaster and Emergency Management (elective)
CKDM 115 Int'l Policies and Disaster Coordination (elective)
CKDM 160 Emerging Issues (required)
CSCI 241 Planning for Emergency Management (required)

Original Title - Certificate in Emergency Management and Response Planning

Revised Title - Certificate in Emergency Management, Threat and Response Planning

Rationale - The revisions above are being made in response to the results of the review for the Certificate in Emergency Management and Response Planning. The four-course structure aligns with curriculum fit, for time and financial savings for students, and allows for effective marketing of the certificate. It is timely for Ryerson to offer a new, four-course certificate with good market recognition of the Ryerson University and The Chang School brand. This recognition also comes with a trend toward increased professionalization (e.g. a university degree credit CE credential is required to fill mid- and senior managerial level positions) for advancement to managerial and director roles in the emergency and response management profession. In addition, the revised, fully degree credit certificate proposed would be submitted for OSAP eligibility.

According to Senate Policy 76, Ryerson's certificate program curricula are to be developed such that their academic quality is not only comparable to that of degree programs, but, whenever academically appropriate, certificate courses should be part of Ryerson's programs or deemed equivalent to degree programs in order to provide students with maximum accessibility and internal degree credit transfer. Consistent with and pursuant to this objective of greater accessibility and internal credit transfer credit, the aforementioned revisions to the Certificate in Emergency Management and Response Planning are proposed.

Transition Plan for Students - The Science, Engineering and Architecture program area will send a communication to students registered in the Emergency Management and Response Planning certificate who, as of September 2021, will have completed less than 50% of the curriculum. A review of active student records shows there are currently 45 students who would be in the position to transfer into the certificate program with the revised curriculum requirements. Of these 45 students who would have the option to transfer:
- 10 have taken CKDM160 as a required course and 4 have taken CSCI241 as a required course. Unfortunately, should these students opt to transfer, these courses will not count towards their completion of the new certificate curriculum.
- Zero students have completed any of the other 4 courses that will be removed from the new certificate curriculum.
- The remaining students are close enough to completion that it is in their best interest to stay in the current certificate.

Note that these numbers will change as some students will take courses during the Spring/Summer term (which will bring them past the "50%" mark of curriculum completion) and, leading up to September 2021, new students will register in the certificate. Students who have completed more than 50% of the courses under the previous curriculum will be advised to follow the curriculum in place at the time of registration.

Current Certificate Structure	Recommended Certificate Structure
Required Courses: (no prerequisites)	**Required Courses:** (no prerequisites)
CKDM 160 Emerging Issues	CSCI 230 Emergency Management Practice
CSCI 232 Incident and Operations Management	CSCI 232 Incident and Operations Management
CSCI 234 Analysis of Critical Incidents	CSCI 234 Analysis of Critical Incidents

CSCI 241 Planning for Emergency Management CSCI 243 Continuity and Risk Management **Electives (select 1):** (no prerequisites) CDCM 125 Disaster and Emergency Incident Communications CKDM 105 Project Management in Disaster Recovery CKDM 110 Law of Disaster and Emergency Management CKDM 115 Int'l Policies and Disaster Coordination CSCI 230 Emergency Management Practice	CSCI 243 Continuity and Risk Management

Proposed Implementation - Fall 2021

Recommendation
Having satisfied itself of the merit of this proposal, the Academic Standards Committee recommends: *That Senate approve the certificate modifications to Emergency Management and Response Planning – Chang School.*

C. CHANG SCHOOL – Certificate Discontinuation for Fashion Coordination and Styling
On January 25, 2021 The Chang School's Executive Committee reviewed and supported the program area's proposal to discontinue the Certificate in Fashion Coordination and Styling. The eight-course Certificate in Fashion in Coordination and Styling dates back to 2002. The curriculum comprises four required certificate-credit courses and four electives, as shown in the calendar excerpt below:

Admission Criteria - It is recommended that applicants have an Ontario Secondary School Diploma (OSSD) with six Grade 12 U or M credits, or equivalent, or mature student status.
Certificate Requirements - The successful completion of eight courses (four required courses and four electives), with a cumulative grade point average of 1.67 or higher, is required to graduate from the certificate program.

Required Courses	Electives (select four)
CDFC 101 Fashion Coordination CDFC 102 Fashion Styling CDFC 103 Design Fundamentals in Fashion CDFC 104 Creating the Image	CCMN 373 Fashion Communication: Professional Approaches CDFA 104 Fashion Drawing I CDFA 110 Fashion Drawing II CDFC 105 Fashion Shows and Special Events CDFC 106 Fashion, Culture, and Society CDFC 107 Fashion Buying CDFC 200 Fashion Photography CENT 500 New Venture Startup CFSN 703 Visual Merchandising and Display CMKT 100 Principles of Marketing

The Certificate has attracted enough continuing education students to sustain the program's viability; however, the program's initial growth period plateaued around 2010 and has since been in an overall state of decline.
● **Enrollment**: Over the past five years, the Certificate has attracted approximately 55 new students and 10 graduates per year.
● **Student Status**: In the past five years, there were 276 new student registrants in the certificate which

demonstrates a reasonably healthy demand for fashion programming among continuous learners. However, in this same period, 120 students were discontinued from the program and 23 students cancelled.

● **Financial Viability**: Due to the number of course enrollments, new certificate students, and graduates, this certificate generated a modest profit over the past five years. However, the non-credit status of the core courses in combination with the attrition rate of registered certificate students is limiting the financial returns.

● **Certificate Ranking**: Based on the number of enrollments in the past five academic years, this certificate is ranked 31st of all 80 Chang School certificates.

Transition Plan - There are 48 students actively registered in the program who have taken a certificate course in the past five years. Each of these students will be contacted to determine a viable plan to help them complete the certificate. Note, many of these students may take advantage of the Summer Fashion Intensive scheduling in the Spring/Summer 2021 term (which offers the four required courses and two electives in non-conflict scheduling over 13 weeks) presenting a comprehensive path to certificate completion.

Concluding Remarks - The current certificate demonstrates there is a market of continuous learners who are interested in fashion programming; however, this audience is increasingly value-oriented and socially conscious. The Chang School will better meet the needs of our learners by developing a new, degree credit, certificate program with curriculum that reflects - and aligns with - the core values of Ryerson's School of Fashion: consciousness of access, sustainability, inclusion, feminism and community.

Implementation - Fall 2021

Recommendation
Having satisfied itself of the merit of this proposal, the Academic Standards Committee recommends*: That Senate approve the discontinued certificate in Fashion Coordination and Styling – Chang School.*

D. CHANG SCHOOL – Certificate Discontinuation for Financial Planning
The Certificate in Financial Planning has been offered for many years through The G. Raymond Chang School of Continuing Education and The Department of Finance at the Ted Rogers School of Management. Analysis of enrolment trends, curriculum structure and the competitive landscape have been reviewed by the Chang School's Program Planning Committee in January 2021. A plan to undertake revisions was proposed by the Business Program Area. However, the PPC committee did not support this approach. Consequently, based on recommendation from the committee, the certificate will be discontinued effective Fall 2021.

The 6 course Certificate in Financial Planning was designed for students who have a bachelor's degree or advanced (3 year) college diploma and want to build on their background in accounting, finance, or management. Upon completion of the certificate program, students are prepared to write the national examinations that lead to two certifications awarded by the FP Canada: Qualified Associate Financial Planner™ certification (QAFP) and Certified Financial Planner® (CFP).

Admission Criteria - Certificate in Accounting–Finance (or equivalent) *or* undergraduate degree *or* a 3-year college diploma **and** the following courses (or equivalents):

Required courses for admission	Prerequisites
CACC414 Intermediate Accounting I*	(CACC 100, CACC 406& CACC 333) or (CACC 110 & CACC 410) or Direct Entry
CECN104 Introductory Microeconomics	None

CECN204 Introductory Macroeconomics	None
CFIN300 Managerial Finance I	CACC 100 or CACC 110 or AFA 100 or Direct Entry
CFIN401 Managerial Finance II	CFIN 300 or AFF 210 or CECN 320
CLAW 122 Business Law	None
CQMS210 Applied Statistics for Business	None

For admission into the certificate, students must obtain approval from the Academic Coordinator before registering in the first course. The seven prerequisite courses for admission into the certificate program present a significant barrier (cost and time) to access for new students. They also put us at a competitive disadvantage relative to our competitors.

Certificate structure - 6 courses:

Required certificate courses	Prerequisites
CACC 522 Taxation for Managers and Financial Planners	CACC 110
CFIN 501 Investment Analysis	Prerequisite: CFIN 401 or AFF 310
CFIN 502 Personal Financial Planning	CFIN 300 or HTA 602 or AFF 210
CFIN 512 Risk Management and Insurance	CFIN 300 or AFF 210 or HTA 602
CFIN 612 Retirement and Estate Planning	CFIN 502 or AFF 502
CFIN 812 Advanced Personal Financial Planning (capstone course)	(CACC 522 or AFA 517), (CFIN 501 or AFF 501), (CFIN 512 or AFF 512) and (CFIN 612 or AFF 612)

The certificate curriculum was designed several years ago primarily through the lens of undergraduate students majoring in Finance, not the adult learner. However, in recent years, changes to the Finance major curriculum has resulted in a significant decline of the undergraduate audience and the program has struggled to perform well. The certificate attracts approximately 5 new CE students per year; no graduations occurred in 2017-18 or 2018-19 (see enrollment snapshot below).

Certificate Student Status	2014–15	2015–16	2016–17	2017–18	2018–19	2019–20	Grand Total
New Cert Students	3	5	5	7	5	4	29
Graduated Program		1	3			1	5
Discontinued	2	4	4	4		4	18
Cancelled				2	1	2	5

In 2018-19, 7 certificate students generated a total of 15 course enrollments across the 6 required certificate courses. In 2019/20 this number declined, with 5 students contributing to a total of 9 enrollments across the certificate courses. This ranked the program as 64th (out of 72 Chang School certificates) in terms of annual course enrollments generated from certificate students.

Reasons for discontinuation -
- Crowded competitive landscape - with the main threats coming from the many college-based programs (full-time, OSAP eligible, and part-time and online options with minimal entry requirements).
- Enrollment trends - have resulted in limited revenue generation and imply low viability of the program. Certificate requirements and prerequisites have made it difficult for students to progress through the certificate. Courses that are not part of other certificate or degree programs do not break even and are only offered infrequently due to level of demand.

- The target student audience – the audience envisioned at inception may have evolved. Current program design and structure is unsuited to the adult learner. The target audience would require redefinition for effective curricular optimization and program marketing. This would translate into considerable investment of time and resources with an uncertain return.

Completion Plan for students in the current Financial Planning certificate - A communication will be sent to students enrolled in the Financial Planning certificate to advise them that the certificate is being discontinued. 4 of the courses will be continued to be offered as they are part of other programs. 2 courses, CACC 522 and CFIN 812 will be offered at least one more time to ensure students have the chance to complete the certificate they had started. They will be informed about course scheduling as relevant.

Implementation - Fall 2021.

Recommendation
Having satisfied itself of the merit of this proposal, the Academic Standards Committee recommends*: That Senate approve the discontinued certificate in Financial Planning – Chang School.*

E. CHANG SCHOOL – Certificate Discontinuation for Media Writing Fundamentals
On January 25, 2021 The Chang School's Executive Committee reviewed and supported the program area's proposal to discontinue the Certificate in Media Writing Fundamentals. The seven-course Certificate in Media Writing Fundamentals dates back to 2007. The curriculum comprises two required courses and five electives, as shown in the calendar excerpt below:

Admission Criteria - It is recommended that applicants have the following:
OSSD with six Grade 12 U or M credits (English recommended) with a minimum average grade of 70 percent, or equivalent, or mature student status with relevant work experience.
Students must complete an application for pre-approval and be approved by the Academic Coordinator before registering for the first course. To obtain an application, visit Forms and Documents.
Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Certificate Requirements - The successful completion of seven courses (two required courses and five electives), with a cumulative grade point average of 1.67 or higher, is required to graduate from the certificate program.

Required Courses	Electives (select five)
CRTA 102 Creative Processes **CRTA 212 Media Writing**	CDMP 125 Fiction Screenwriting CDMP 126 Non-Fiction Screenwriting CRTA 941 Dramatic Writing CRTA 943 Comedy Writing CRTA 944 Writing for Animation CRTA 945 Writing for Factual and Reality Programs

Unfortunately, as summarized below, the Certificate in Media Writing Fundamentals has never attracted a significant number of continuing education students and is not financially viable.
- **Enrollment**: The certificate attracts approximately one new student per year and, in the certificate's 13 year history, there are no graduates.
- **Student Status**: In the past five years, there were five new student registrants in the certificate, nine

students discontinued, and one student cancelled.
- **Financial Viability**: Over the past five years, the certificate generated a cumulative loss. Low enrollments for the required courses limits the financial return; the expenses outweigh the tuition revenue earned.
- **Certificate Ranking**: Based on the number of enrollments in the past five (5) academic years, this certificate is ranked 75th of all 80 Chang School certificates.

Transition Plan - Currently, there are six (6) students who are considered active in the certificate; however, two of these students have taken no courses in the program. Each student will be contacted to determine a viable plan to help them complete the certificate before the required courses are phased out in Fall 2021. It is possible, too, that some of these students may be interested in transferring to either the Certificate in Film Studies or the Certificate in Digital Art Production as all four who have taken a certificate course in the past five years have successfully completed CDMP 125 *Fiction Screenwriting*, which is an elective in both alternate certificate programs.

Concluding Remarks - Despite the lack of student uptake in this certificate, Radio and Television Arts (RTA) is a broad-ranging field including production, reporting, script writing, programming, management, advertising, and sales for broadcasting, communications, and media. The Chang School values its relationship with Ryerson University's esteemed RTA faculty and welcomes working together in potentially proposing a new certificate program that would align with the School's strategic priorities and better meet the learning goals of continuing education students.

Implementation - Fall 2021

Recommendation
Having satisfied itself of the merit of this proposal, the Academic Standards Committee recommends*: That Senate approve the discontinued certificate in Media Writing Fundamentals – Chang School.*

F. CHANG SCHOOL – Certificate Discontinuation for News Studies
On January 25, 2021 The Chang School's Executive Committee reviewed and supported the program area's proposal to discontinue the Certificate in New Studies. The six-course Certificate in News Studies dates back to 2012. The curriculum comprises one required course and five electives, as shown in the calendar excerpt below.

Admission Criteria - It is recommended that applicants have an Ontario Secondary School Diploma (OSSD) with six Grade 12 U or M credits, or equivalent, or mature student status.
Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Certificate Requirements - The successful completion of six courses (one required course and five electives), with a cumulative grade point average of 1.67 or higher, is required to graduate from the certificate program.

Required Course	Electives (select five)
CNNS 101 Introduction to News Studies	CNNS 102 Understanding Multimedia Journalism
CNNS 344 Making a Difference: How Journalism Matters
CNNS 401 History of Journalism
CNNS 404 Journalism's Best
CNNS 410 Queer Media

	CNNS 412 Documentary Survey
	CNNS 419 Journalism in Comedy
	CNNS 500 Journalism and the Arts
	CNNS 502 Follow the Money: Business Journalism
	CNNS 505 Health and Science Journalism
	CNNS 512 Reporting Sports

Unfortunately, as summarized below, the Certificate in News Studies has never attracted a significant number of continuing education students and is neither financially viable nor presents opportunities for growth.

● **Enrollment**: The certificate attracts approximately eight (8) new students per year; since 2015, there have been a total of four (4) certificate graduates.
● **Student Status**: In the past five years, there were thirty-nine (39) new student registrants in the certificate; however, out of these students, seven (7) successfully completed one course - or more - in the certificate. In this same period, nineteen (19) students were discontinued from the program, and seven (7) students cancelled. In the most recent academic year (2019-20), Discontinued Students outnumbered New Students at a 7:1 ratio.
● **Financial Viability**: Over the past five years, the downward trend of enrollments in the certificate courses have limited financial returns; without prorating academic coordination costs to include the management of undergraduate enrollments in courses run through the Chang School, the certificate itself runs at a loss.
● **Certificate Ranking**: Based on the number of enrollments in the past five academic years, this certificate is ranked 66th of all 80 Chang School certificates.

Transition Plan - There are seven (7) students actively registered in the program who have taken a certificate course in the past five years; all but one of these students have successfully completed the required course. Each of these students will be contacted to determine a viable plan to help them complete the certificate, potentially through the continued use of tied sections with course equivalents offered through the School of Journalism.

Concluding Remarks - Despite the lack of student uptake in this certificate, journalism is a broad-ranging and important field. The Chang School values its relationship with Ryerson University's esteemed faculty at the School of Journalism and welcomes working together in potentially proposing a new certificate program that would align with the School's strategic priorities and better meet the learning goals of continuing education students.

Implementation - Fall 2021

Recommendation
Having satisfied itself of the merit of this proposal, the Academic Standards Committee recommends: *That Senate approve the discontinued certificate in News Studies – Chang School.*

G. NEW INTERDISCIPLINARY MINOR – Innovation and Zone Learning

Update - This document was submitted and discussed before the Senate in November 2020. The Senate voted to table the proposal and instead requested an update on Zone Learning prior to consideration of the Minor. Such an update was presented before the Senate Priorities Committee and then the Senate in January of 2021. Based on the feedback and discussion from that session, the following document contains some clarifications (highlighted in bold italic font), and is now being submitted for re-consideration by the Senate.

Background and Rationale - This proposal for a minor in Innovation and Zone Learning is brought forward jointly by the RTA School of Media in the Faculty of Communication & Design and the Department of Computer Science in the Faculty of Science, to commence in Fall 2021. The Office of Zone learning has advised and collaborated on the creation of this minor.

The world is facing unprecedented challenges – social, economic, biomedical, and environmental – driven by globalisation as well as social, scientific, biological, and technological developments (Cinamon, Hardin, & Flum, 2019). The concept of stable occupations common during the 20th century has almost disappeared, with life being in permanent flux and in a state of becoming. Individuals are increasingly responsible for their own development and required to manage their own professional journeys and navigate a lifetime of changes (Savickas, 2016). In this, higher education institutions will be largely responsible for preparing new generations of students to perform roles that have not yet been created, to lead scientific developments that have not yet been foreseen, to develop technologies that have not yet been anticipated, and to solve problems that have not yet been experienced.

To navigate through such high degrees of ambiguity, uncertainty, and complexity, students will have to develop transferable skills: creativity, imagination, adaptability, critical thinking, problem solving, among others. These challenges provide a meaningful opportunity for Ryerson University to create and frame a new interdisciplinary minor that will perform a vital role in encouraging students at Ryerson to develop the knowledge, skills, attitudes, and values that will enable them to contribute to and benefit from an inclusive and sustainable future.

In offering a Minor in Innovation and Zone Learning, four priorities will be effectively addressed:
 1: Developing a minor program that brings together courses from the Faculty of Communication & Design, the Faculty of Science, and the Office of Zone Learning will positively renew the focus on "collaboration and interdisciplinary approaches to learning" as well as provide "interdisciplinary and experiential learning opportunities that bring students and faculty together to address real-world problems". In this, the Senate Policy 169 on Experiential Learning will be thoroughly followed.
 2: Providing courses along an educational continuum, from courses that encourage students to develop their creative and critical thinking, to courses that help them to ideate and prototype will invariably promote a "culture of innovation across campus that helps students to think creatively, take initiative, and demonstrate resourcefulness"
 3: Carrying out the experiential learning components of the minor program at several zones across campus, will unquestionably offer opportunities for students to "participate in zone learning, shaping initiatives from the ground up, and gaining real-world experience".
 4: Offering experiential learning opportunities that involve either work placements, consulting projects and civic engagement initiatives, or independent student-led projects addressing real-world problems will very likely strengthen external connections as well as encourage students to become "more fully engaged with communities, service providers, and industries as partners in their learning experiences" and bring "new perspectives together to consider important questions and solutions." Helping students attain high levels of curiosity, creativity, imagination, adaptability, critical thinking will surely help them prepare for "the complex society in which they will live and work."

As additional context, it should be noted that there is currently an Optional Specialization in Zone Learning, a designation which can be requested to appear on a student transcript when they have completed four semesters of enrollment in CEDZ 100. The proposed Minor is distinct from this Optional Specialization in several key ways:

1. *The Zone Minor includes graded credit-courses that can make up part of the degree-requirements of a student's academic career. The Optional Specialization, on the other hand, consists of activities in the pass/fail CEDZ 100 course, which a student must complete in addition to their degree-requirements. Student-consultations have revealed a desire for their Zone activities to become a part of their degree-credit activities, to fit in schedules that may not allow extra-curricular work over and above graduation requirements*

2. *The Optional Specialization is based solely on student activity in their Zone within the confines of the CEDZ 100 course. The Minor includes a variety of additional courses that provide context and depth to student entrepreneurial activity, and supports a rounded set of skills drawing from courses in a number of different departments. Where the Optional Specialization denotes student focus on their project, the Minor indicates development of an entrepreneurial mindset through a number of avenues.*

Learning Outcomes – The following twelve skills have previously been identified and tested at Ryerson:

Skill	Definition
Critical thinking/innovation/problem solving	Ability to identify, analyze, and evaluate situations, ideas, and information to formulate responses and solutions.
Creativity	Ability to imagine and devise new, innovative ways of addressing problems, answering questions, or expressing meaning through the application, synthesis or repurposing of knowledge.
Communication	Ability to listen to, understand, convey, and contextualize information through verbal, non-verbal, visual, and written means.
Collaboration	Ability to work on a team towards a common goal, including the ability to prevent and manage conflict.
Curiosity and metacognition	Ability and desire to ask questions and to demonstrate open-mindedness and inquisitiveness.
Initiative	Ability and desire to proactively undertake a new task or goal.

Skill	Definition
Persistence/grit	Ability to sustain interest and effort and to persevere to accomplish a task or goal.
Adaptability	Ability to change plans, methods, opinions or goals in light of new information.
Leadership	Ability to effectively direct, guide, and inspire others to accomplish a common goal.
Social and cultural awareness	Ability to interact with other people in a socially, culturally, and ethically appropriate way.
Ethics and personal integrity	Ability to understand external systems of rules and laws as well as to develop internal systems of principles which guides our behaviour
Risk assessment	Ability to identify, quantify, and prioritize risks.

Curriculum - Curriculum as it would appear in the Calendar:

Minor in Innovation and Zone Learning
The Minor in Innovation and Zone Learning offers students the opportunity to take courses in a wide range of subjects and disciplines that will help them develop as change makers and launch new ideas and new ventures into the world. Coursework will help students foster their ability to identify, analyze, and evaluate situations, ideas, and information, and to formulate responses and develop solutions to tangible problems. Students will pursue the development of their projects and ventures with the support of the Zone Learning network and its resources namely co-working spaces, research labs, and mentorship from peers, industry advisors, and academic researchers. Students who complete the program will have obtained curricular credit in a critically important secondary field of study, which coupled with their own majors, will leave them better prepared for their future roles.
Administered by: RTA School of Media, Department of Computer Science, and Office of Zone Learning

To obtain the minor, students will have to take three (3) required courses and three (3) electives from the following curriculum:

Required courses: One (1) of the following:

FCD 815/CRI 815/RTA 924 Design Solutions Supercourse
SCI 888 Evidence-Based Innovation
ENT 500 New Venture Startup

And both of the following (see additional note below):
ZON 100 Zone Learning Project I
ZON 200 Zone Learning Project II (continuation of ZON 100 Zone Learning Project I)

Elective courses: Three (3) courses from the following two (2) categories (no more than 2 courses per category; see additional restrictions below):

Ideation and Prototyping Category	Empathy and Growth Category
CPS 101 Intro to App Development CPS 109 Computer Science I CPS 513 Intro to Multimedia Computation CPS 847 Software Tools for Startups RTA 223 Designing Material Experiences RTA 321 Intro to Tangible Media RTA 102 Creative Processes or RTA108 Creative Processes-Sport Media or RTA107 Creative Processes-New Media FCD 962/RTA 962 Interaction Design FCD 222 Coding for Creatives or RTA 222 Intro to Computational Arts CRI 300 Digital Design Studio	CRI 780 Your Creative Self CRI 500 Project Management SSH 505 Making the Future (Arts) PSY 217 Psychology and Design SSH 100 Inquiry and Problem-Solving (Arts) SSH 502 Community Action Research

Notes:
1. Restriction: Students enrolled in any RTA School of Media program may count a maximum of 3 RTA-coded courses (or co-listed FCD/CRI courses that also have an RTA-code) toward completion of the Minor.
2. To enroll in ZON 100 or ZON 200, students must first be accepted as a member of one of Ryerson's Zones. The table below summarizes the entry requirements for each Zone.

Zone	Focus	Memberships and Key Requirements	Frequency	Application page
Biomedical Zone	Innovative need-based solutions for the clinical environment	Venture applications are reviewed by an advisory panel. Ventures resident in the Zone must also meet the requirements of Saint Michael's Hospital including adequate insurance.	All year.	Link
Clean Energy Zone	Clean energy - innovations or ideas.	The requirements are to be developing clean and sustainable energy innovations, addressing societal needs and providing real environmental and socio-economic impact. The project should require access to state of-the-art research labs, co-	All year.	Link

		working spaces and curated mentorship from industry partners and academic researchers and faculty related to clean energy.		
Design Fabrication Zone	Early-stage ideas for inventions, businesses and installations, looking to move along the continuum from design to prototype and mass manufacturing.	Three membership streams apply: (1) Startup, (2) Experimental, and (3) Associate. The requirements for (1) are to have an initial version of a product concept, and a need for further prototyping and/or product development must exist. Also required in (1) is the existence of a co-founder or lead collaborator dedicated to product development. The requirements for (2) are to have a concept for a creative project or installation, and that the limits of design be pushed. The requirements for (3) are the desire to join an existing team on a commercial startup or an experimental project, and some expertise in product design or physical prototyping, in drawing or web design, or in sales or marketing.	Bi-monthly or six times a year, in January, March, May, July, September, and November.	Link
DMZ	High growth software technology-based businesses.	Two membership streams apply: (1) Incubator and (2) Accelerator. The requirements for (1) are to have at least one full-time founder, a CTO (or in-house technical lead or show a clear path to moving a part time lead onboard full time), an MVP that has some form of market validation, and demonstrate the potential to grow and scale sufficiently to reach the eligibility criteria for our growth accelerator. The requirements for (2) are to have at least one FTE dedicated to sales and revenue development, a full-time CTO or in-house technical lead, a minimum of $20K in monthly revenue through an existing customer network, be in market and demonstrate steady revenue for at least four consecutive months, and be able to relocate to the DMZ's Toronto office for the duration of the program.	Three times a year.	Link

Fashion Zone	Fashion-inspired startups.	Two membership streams apply: (1) R&D and (2) Associate. The requirement for (1) is to be looking to radically design new ideas and businesses, focused on the theme of creative recovery. The requirements for (2) are to have an early-stage business idea and be interested in interning with a Fashion Zone start-up to develop skills and a concept.	All year.	Link
iBoost Zone	Solving real customer problems using technology.	The requirements are to be developing user-centric technologies, looking for a collaborative environment dedicated to educating and supporting entrepreneurs throughout their journey from incubation to commercialization. The venture should be able to benefit from access to the programs, advisors, mentorship, and co-working space.	All year.	Link
Legal Innovation Zone	Better legal solutions for the consumers of legal services.	Four membership streams apply: (1) Innovator's Canvas, (2) Concept Framework, (3) Spring Studio, and (4) Incubate. The requirements for (1) and (2) are open. The requirements for (3) are to be looking to develop a proof of concept into a market-ready solution, be ready to invest 3 hours per week for the virtual sessions, and be able to attend a virtual demo day. The requirements for (4) are to have a product in the market with early sales/users, have full-time commitment (at least one member), and demonstrate a potential to grow and scale to achieve high impact in the sector.	(1) and (4) all year, and (2) and (3) every term.	Link

Science Discovery Zone	Evidence-based approach to testing big ideas and discovering new ventures with an emphasis on science-based ventures.	Three membership streams apply: (1) Participate, (2) Ideate, and (3) Validate. The requirements for (1): interest in learning how to solve problems, meeting like-minded people, and learning about the evidence-based approach to innovation. It is not necessary to have a business or startup idea. The requirements for (2) are to have an idea/problem that they are passionate about solving and to want to start applying their knowledge to make it a reality. The requirements for (3) are to have an early-stage solution and to require either business or technical support.	All year.	Link
Social Ventures Zone	Building social ventures that create real impact.	Two membership streams apply: (1) Ideation and (2) Incubation. The requirements for (1) are to have an idea for social change, to make the idea a reality, to want to create social change, to be passionate, and to want to be supported as work on the idea starts. The requirements for (2) are to have a social venture that is ready for the next step or to have a social project, enterprise, service, or product that is beginning to make a difference to the people or system that it touches, but you want to take it to the next level. Applications will also be assessed in terms of potential impact, degree of innovation, potential of sustainability, and personal capacity.	Every term.	Link
Transmedia Zone	Developing innovative storytelling across entertainment media platforms.	Two membership streams apply: (1) R&D and (2) Associate. The requirement for (1) is to be looking to radically design new ideas and businesses, focused on the theme of creative recovery. The requirements for (2) are to have an early-stage business idea and be interested in interning with a Creative Studio start-up to develop skills and a concept.	Every term.	Link

Note: Zones regularly introduce new programs and adjust existing programs. Students are advised to contact the Zones or the Office of Zone Learning (zonelearning@ryerson.ca) for current information on Zone entry requirements.

New Course Descriptions –

ZON 100 - Zone Learning Project I

Calendar Description **-** This structured experiential learning opportunity allows students to focus on a project within one of Ryerson University's Zones, either as the founder of an initiative or as a partner with an existing team. The student will improve their knowledge through engaged experiential learning while developing their social and collaborative skills as part of a team and/or a Zone-community. Students will set milestones with the course-instructor based on their individual project or team needs, meet regularly to check on progress/reassess goals, and share accountability-reports with peers. Students will complete regular written updates on milestones, as well as an overall critical self-reflection paper detailing outcomes and next steps for themselves and the project. The student must apply for and be accepted as a member of one of the Zones in order to take this course.
Pre-requisites: Departmental consent

ZON 200 - Zone Learning Project II

Calendar Description **-** This will offer students the opportunity to expand the learning undertaken in ZON 100. Students can continue working with the same initiative/team, or develop a new project/relationship. This structured experiential learning opportunity allows students to focus on a project within one of Ryerson University's Zones, either as the founder of an initiative or as a partner with an existing team. The student will improve their knowledge through engaged experiential learning while developing their social and collaborative skills as part of a team and/or a Zone-community. Students will set milestones with the course-instructor based on their individual project or team needs, meet regularly to check on progress/reassess goals, and share accountability-reports with peers. Students will complete regular written updates on milestones, as well as an overall critical self-reflection paper detailing outcomes and next steps for themselves and the project. The student must apply for and be accepted as a member of one of the Zones in order to take this course.
Pre-requisites: Departmental consent

Governance –

The Minor will be led by the RTA School of Media and the Department of Computer Science, in close partnership with the Office of Zone Learning. Its governance will be the responsibility of a committee formed by representatives of the Faculty of Communication & Design, the Faculty of Science, the RTA School of Media Curriculum Committee, the Department of Computer Science Curriculum Committee, and the Office of Zone Learning. This committee is expected to meet once a year, after a governance framework is designed and implemented. The committee will verify that all courses are still on offer, and deal with any modifications or structural issues. For the purposes of hiring, loading, or scheduling, the new Zone Learning courses will be officially hosted within one particular School, but the course-code will be an original Zone Learning designation (created in consultation with the Course Calendar team). The hiring for ZON 100 and ZON 200 will be done by the RTA CLAC, in accordance with all CUPE processes. Zone Learning will transfer funds to RTA to cover the costs of the CUPE hire at the end of each term. The RTA CLAC will also manage all CUPE teaching-assessments, and any labour issues. Any major changes to the ZON 100 or ZON 200 courses that would require approval of a curriculum-committee will be submitted to the RTA curriculum committee. We are drafting an MOU to be signed between Zone Learning and RTA that lays out this financial/oversight arrangement, to make sure that the arrangements are documented and can outlast any verbal-only agreements between academic leaders.

Recommendation
Having satisfied itself of the merit of this proposal, the Academic Standards Committee recommends: *that Senate approve the new Minor in Innovation and Zone Learning.*

H. *For Information*: **CHANG SCHOOL CERTIFICATES - Revisions (December 2020; February 2021)**
  i. Certificate in Music: Global and Cultural Contexts: Course Addition (Elective)
  ii. Certificate in Occupational Health and Safety: Course Description Change
  iii. Certificate in Project Management: Course Deletion (Elective)
  iv. Certificate in Film Studies: Course Repositioning (CMPF300 and CMPF301); Course Addition (CMPF207)

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
Denise O-Neil Green, Vice President, Equity and Community Inclusion
Bettina West, Director, Curriculum Quality Assurance
Amy Peng, Faculty of Arts, Economics
Dale Smith, Faculty of Arts, English
Gavin Adamson, Faculty of Communication and Design, Journalism
Robert Clapperton, Faculty of Communication and Design, Professional Communication
Eric Liberda, 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
Amirnaser Yazdani, Faculty of Engineering & Architectural Science, Electrical, Computer & Biomedical Engineering
Miranda Kirby, Faculty of Science, Physics
Gagan Gupta, Faculty of Science, Chemistry and Biology
Farid Shirazi, Ted Rogers School of Management, Information Technology Management
Mary Han, Ted Rogers School of Management, Entrepreneurship and Strategy
Graham Hudson, Faculty of Law
May Yan, Library
Linda Koechli, Chang School of Continuing Education
Dalia Hanna, Chang School of Continuing Education
Julia Spagnuolo, Student
Kavin Nguyen, Student