

YEATES SCHOOL OF GRADUATE STUDIES

REPORT TO SENATE, OCTOBER 2, 2012

1. *Master's in Digital Media*

Motion:

"That Senate approve and forward the proposal for a *Master's in Digital Media* to the Quality Council for approval.

2. *MSc in Applied Mathematics - Addition of Major Research Paper Option (for approval)*

Motion:

"That Senate approve the *Major Research Paper Option addition to the MSc In Applied Mathematics*, as approved by YSGS Council at its September 11, 2012 meeting."

3. *Professional Master's Diplomas Framework (for approval)*

Motion:

"That Senate approve in principle the Proposal for a Framework for Professional Master's Diplomas as presented in the YSGS report dated September 18, 2012."

Submitted by:

A handwritten signature in blue ink, appearing to read 'J Mactavish', with a long horizontal flourish extending to the right.

Jennifer Mactavish, Dean
Chair, Yeates School of Graduate Studies Council

1. MASTER'S IN DIGITAL MEDIA:

The Yeates School of Graduate Studies submits the proposal for a *Master's in Digital Media* to Senate for its approval and subsequent submission to the Quality Council for approval. The proposal was developed in compliance with Senate policies 110 (Institutional Quality Assurance Process) and 112 (Development of New Graduate and Undergraduate Programs). The program brief is available for review in the office of the Secretary of Senate or in the office of the Dean of the Yeates School of Graduate Studies (YDI-1109, 1 Dundas Street West).

Motion

That Senate approve and forward the proposal for a *Master's in Digital Media* to the Quality Council for approval.

Note: The Provost has final authority to determine whether a program may proceed.

RYERSON UNIVERSITY
MASTER'S IN DIGITAL MEDIA

EXECUTIVE SUMMARY

Digital media is most broadly defined as the digital production of multimedia content and tools. Many traditional sectors – in art, education, science, health, engineering, and design – now collaborate using these emerging digital media technologies. Digital media sectors offer Canadians new and well-paid jobs in programming, game design, mobile applications, special effects, 3-D animation, sound design, computer graphics, and many other fields. Digital media professionals are in great demand, and many digital media companies show robust health, at a time when manufacturing industries falter.

The Honourable Tony Clement, Minister for Industry Canada, claims “few areas offer [Canada] greater reason for optimism than the digital economy.”¹ Canadian past and present success stories like RIM, Corus Entertainment, and marbledmedia show potential for remarkable growth and global competitive edge.

The Ontario Ministry of Education’s elementary and secondary school curricula (2009/10) reflect the belief that *all* Canadians will gain from a higher usage of digital media, while the question of “equal access” (to bandwidth, for instance) is now firmly embedded in political thinking. The guiding vision for higher education in Ontario emphasizes, among other outcomes, the need for transformative change to ensure high quality and internationally competitive preparation that maximizes engagement in the creative economy. Digital media is core to this economy in its linking of the technical, creative, industry and business know how necessary in today’s economic, social and cultural contexts.

While recognizing the importance of these trends nationally, Canada continues to lag behind most peer countries in productivity and innovation measures (Report Card on Canada, 2012), yet, somewhat paradoxically, has among the most well educated populations in the world. The Conference Board of Canada recommends that Canadian universities graduate more students in disciplines that support innovation.²

Ryerson’s Master’s in Digital Media (MDM) program is designed to address these demands – to incubate transformative ideas, to increase development, and to prepare highly qualified personnel for a growth industry. This is envisioned as a starting point for launching a broader platform of

¹ Speech, November 2010, www.ic.gc.ca/eic/site/ic1.nsf/eng/06098.html

² “A Report Card on Canada: 2009/10,” Conference Board of Canada: www.conferenceboard.ca/HCP/Details/Education.aspx

future graduate program offerings in digital entrepreneurship and innovation that will produce the talent needed in the global creative economy.

Ryerson has a critical mass of research laboratories and resources in the digital media arena. These include the Ryerson Multimedia Lab; Ubiquitous Computing Lab; Digital Cinema and Advanced Visualization Lab; Experiential Design and Gaming Lab; AccessFabrik Lab; Infoscape Research Lab; Human Factors Lab; Robotics and Manufacturing Automation Lab; Digital Value Lab; and the Sound, Mind, Applied Research & Technology (SMART) Lab; the Centre for Learning Technologies (CLT), at the TRSM; and the Experiential Design and Gaming Environment (EDGE) Lab.

Four of Ryerson's six faculties – the Faculty of Communication and Design (FCAD), the Faculty of Engineering and Architectural Science (FEAS), the Faculty of Science (FOS), and the Ted Rogers School of Management (TRSM) along with the Digital Media Zone (DMZ) and the Yeates School of Graduate Studies (YSGS) – are part of an MDM program that represents vital areas of digital media: user experience/design, technology, media arts, and business/management.

Ryerson holds several digital industry-focused research chairs, and Ryerson faculty typically combines academic credentials with business and professional experience. The typical Ryerson MDM faculty member is familiar with industry and has a deep knowledge of content in such areas as computer science, nanotechnology, wireless broadband networks, online identity construction, politics, film studies, rehabilitation engineering, privacy laws, e-commerce, etc. Ryerson is therefore able to draw on deep and broad faculty expertise in each of the three contributing areas (design, technology, and business) with the necessary connections to industry. Teaching resources will allow for 8 new courses to be offered as part of the program; existing courses offer added breadth of elective choices. Ryerson also has sufficient links with industry partners to ensure a supply of diverse, highly interesting and relevant adjunct instructors and project co-supervisors.

The Ryerson MDM will admit 25-35 students in the first year with steady state enrolment expected by the third year. The proposed program will be offered as a 12 month, project focused, professional Master's degree.

In the first semester, 5 core graduate courses will cover: Foundations, Digital Media Environments, Interaction Design for Digital Media, Digital Media Entrepreneurship, and Interdisciplinary Improvisation. Students will choose one of three project streams: Industrial Focus, Entrepreneurial Focus, or Art/Design Focus. This choice will determine options for electives and projects in the second and third semesters. For the second and third semester 2 elective credits are available. Students in the Art/Design and Industrial streams will take two freely chosen elective credits from a list of approved courses; while students in the Entrepreneurial stream will take one prescribed and one freely chosen elective credit.

There are two project modules: Project 1 (Intensive Introduction to Project Management/Team Collaboration, 8 weeks) and Project 2 (6 month long project with a focus on either Industrial, Entrepreneurial or Art/Design). Students will enrol in both Project 1 and 2 at the beginning of the 2nd semester but will complete Project 1 prior to starting Project 2.

TOTAL DEGREE CREDITS = 9

The Ryerson MDM graduate, while demonstrating expertise in one area, will be able to work effectively within all three strands – art/design, technology, and entrepreneurship/business – and speak the language of each. Additionally, graduates will become: multi-disciplinary, team-focused and collaborative, industry-facing, highly-qualified personnel able to prototype and innovate. They will be passionate, confident and disciplined, and able to leverage their real-world experience.

These outcomes complement Ryerson's Academic Plan (2008-13) and reputation for educating students who excel in highly skilled jobs, generate companies, expand Ryerson's culture of innovation, strengthen Ryerson's position among leaders in digital media innovation, act as a research hub, and as a nexus of industry collaboration.

2. MAJOR RESEARCH PAPER OPTION ADDITION TO THE MSc IN APPLIED MATHEMATICS.

Motion

That Senate approve the *Major Research Paper Option addition to the MSc In Applied Mathematics*, as approved by YSGS Council at its September 11, 2012 meeting.

RYERSON UNIVERSITY
MAJOR RESEARCH PAPER OPTION ADDITION TO THE MSc IN APPLIED MATHEMATICS
DEPARTMENT OF MATHEMATICS
6/11/2012

ABSTRACT

The Department of Mathematics proposes to re-organize the current curricular structure of the MSc in Applied Mathematics. The new program will contain two options: a Thesis Option and a Major Research Paper Option. The proposed changes will address the needs of those students who are interested in taking more courses to broaden their knowledge in Applied Mathematics. The changes will provide students with more flexibility as they will be able to choose, at their will, which of the two options best suits their interests.

This document describes an option addition to the MSc Program in Applied Mathematics. Presently, the program requires all its students to complete a thesis in order to obtain their degree.

The Department proposes that the current MSc Program in Applied Mathematics be modified so that it features the following two options:

Thesis Option (TO) which retains its current structure of five courses and a thesis.

Major Research Paper Option (MRPO) which requires nine courses and a major research paper.

Rationale for new Program Option:

The current MSc program allocates about four academic terms for students to complete their thesis work; the result is a high quality and in depth work in Applied Mathematics. Given our past experience with the program, consultation with colleagues at other universities we find the need to allow the students, if they wish to do so, to take more courses and replace the thesis requirement by a major research paper. The present single option (MSc Thesis based option), is heavily slanted towards research and requires a strong background in order to successfully complete a high quality thesis in advanced mathematics. Some students would prefer to opt for a research paper based MSc as this will solidify their mathematical background by allowing them to take more courses and, in so doing, consolidating their overall knowledge in Applied Mathematics. Moreover, it will better prepare them for the workforce as the extra courses they take will allow them to pick up new techniques and tools valuable to industry. The proposed new MSc option requires a *Major Research Paper* which will introduce students to independent research but without the advanced mathematical expectations placed on the TO's thesis requirement.

It should be noted that the proposed MSc option, along the associated changes to our overall MSc in Applied Mathematics, will bring our program more in line with the norm across Ontario and Canada. At the same time the proposed changes maintain the current distinctive program characteristics and enhance course variety and overall quality. We provide examples of similar program options at other universities in an Appendix to this document.

General Comments:

The program option's structure, as well as the expected time line for the two options, is detailed in a separate document. The Major Research Paper work is spread over two terms, one of them the Spring-Summer term as this makes the deployment of the program more efficient (few, if any, courses are offered over this term).

In order to make the two program options academically equivalent, students pursuing the MRPO will need to complete a larger number of courses to graduate; this will require the Department of Mathematics to alternate the elective courses offered in order to supply the required diversity. Students taking the Major Research Paper Option will also have available graduate courses being offered at Ryerson by other departments. There are a number of such courses that complement and enhance very well the applied nature of the MSc program in Applied Mathematics.

The financial impact related to offering the proposed Major Research Paper Option is minimal. Given that the Department will have the ability to alternate the offering of elective courses, the resulting financial burden will be the addition of one or at most two additional graduate courses being offered per academic year. It is relevant to indicate that in the academic year 2012-2013, the Department will run three courses in the Fall term and four courses in the Winter term.

Relation between both Program Options:

In general, students will enter into the MSc program without having made a decision about what option to pursue. Students will be required to opt for one of the two program options by no later than their second term of studies (which should be the Winter term after their Fall term admission). This will allow students to make an informed decision as, at that time, they will have a good appreciation of the research opportunities available to them in the Department of Mathematics. Students will also be counselled by their prospective Supervisors and the Graduate Program Director as per what Program Option may be more suitable for them.

There may be some unforeseeable circumstances under which students may request to be transferred, before completing their degree requirements, from the MRPO to the TO or vice versa. These requests will be considered, on a case-by-case basis, by the Graduate Program Committee that will make a final decision on the matter.

As detailed in a companion document (which provides in a table format the Curriculum and suggested Timeline), students in both program options are required to take the two technique courses (AM8101 and AM8102: Principles and Techniques in Applied Mathematics I and II, respectively) as well as at least one of the two foundation courses (AM8001- Analysis and Probability, AM8002- Discrete Mathematics and Its Applications). At the same time, the Department will strongly encourage students to take the two foundation courses during their first term of study. In this way, students will have access to a wider set of elective courses; this move will also improve their mathematical breadth. It will also provide to all graduate students from the program a more solid foundation to pursue PhD studies.

As suggested above, the proposed MSc options are fully compatible as both set of students will be obtaining credits from the same collection of courses. Both program options are structured so that the first two terms are common and a decision is postponed, as of what option the student should elect to pursue, until the end of the second term.

For convenience we briefly summarize below the requirements for both program options; a separate document, included along this proposal, provides full details on curriculum requirements.

Summary of Major Research Paper Option Requirements:

Students are required to complete nine credit courses, with at most one of them being a directed studies course, and a Major Research Paper. The Major Research Paper work spreads over two terms and requires the supervision of a Departmental faculty member. A separate document, included along the present proposal, indicates the curricular requirements and procedures applicable to the Major Research Paper Option.

Summary of Thesis Option Requirements:

Students are required to complete five credit courses, with at most one of them being a directed studies course, and a research thesis. A separate document, included along the present proposal, indicates the curricular requirements and procedures applicable to the Thesis Option. This Option retains exactly the same curriculum than the current MSc in Applied Mathematics.

Implications for External Recognition:

The changes will bring the MSc Program in Applied Mathematics more in line with similar programs across Canada. The proposed changes will allow students to channel their academic strengths in a natural way and, in so doing, the research developed in the major research paper will be more in tune with their capabilities.

Implementation of Changes:

It is the intention of the Department of Mathematics to apply the proposed changes to the students entering into the program in September 2013.

Appendix:

Information on Related MSc Programs in Canada

Most MSc programs in Ontario, and elsewhere in Canada, have a program structure that allows for a thesis option or the equivalent of a major research paper option. We provide brief descriptions for two examples from Ontario Universities and another one from the University of British Columbia:

UWO: MSc in Applied Mathematics at the University of Western Ontario:

<http://www.apmaths.uwo.ca/gradprogram.shtml>

The program at Western provides two options:

- 1) A thesis-option which consists of four courses plus a thesis.
- 2) A course work-option that requires the completion of eight courses, of which at least six are at the graduate level, and the students should prepare and present a review paper under the direction of one of the members of the Department.

UW: MSc in Applied Mathematics at the University of Waterloo.

http://www.math.uwaterloo.ca/AM_Dept/grad/master.shtml

The Waterloo program offers two options:

- 1) A thesis-option which requires four courses, including a breadth requirement plus a thesis.
- 2) A course work -option that requires eight courses, of which at most three could be cross-listed undergraduate or offered by other departments, and a Master's research paper which is essentially a one-term review paper and is usually 25-35 pages in length. The Master's research paper is read by the research supervisor and one other faculty member.

UBC: MSc in Mathematics at the University of British Columbia.

<http://www.math.ubc.ca/Grad/gradRequirements.shtml#ma>

To complete the Master's (M.A. or M.Sc.) program, a student must:

- 1) Satisfy a set of prerequisites (described in above web page).
- 2) Earn at least 30 credits in one of this two ways:

Option One:

- a) earn 27 or more credits from MATH courses numbered 400 or higher, at most 6 credits of which can come from MATH courses numbered 400-499;
- b) earn 3 credits for MATH 589 (M.Sc. Major Essay);
- c) pass the qualifying examination described below.

Option Two:

- a) earn 24 or more credits from MATH courses numbered 400 or higher, at most 6 credits of which can come from MATH courses numbered 400-499;
- b) earn 6 credits for MATH 549 (Thesis for Master's Degree).

Applied Mathematics Proposal:

Timeline and Curriculum.

Suggested Timelines

THESIS OPTION (6 Terms)

Fall #1	Winter #1	S/S #1
AM8101 (Princ. & Tech 1)	AM8102 (Princ. & Tech 2)	
AM8001 (Foundation)	Elective	Thesis Work
AM8002 (Foundation)	AM8000 (Seminar)	
AM8000 (Seminar)		
Fall #2	Winter #2	S/S #2
Thesis Work	Thesis Work	
AM8000 (Seminar)	AM8000 (Seminar)	Thesis Work

MAJOR RESEARCH PAPER OPTION (5 Terms)

Fall #1	Winter #1	S/S #1
AM8101 (Princ & tech 1)	AM8102 (Princ & Tech 2)	
AM8001 (Foundation)	Elective	Major Research Paper
AM8002 (Foundation)	AM8000 (Seminar)	Elective
AM8000 (Seminar)		
Fall #2	Winter #2	
Major Research Paper	Elective	
Elective	Elective	
AM8000 (Seminar)	AM8000 (Seminar)	

Detailed Description of Program Options: Curriculum Requirements and Comparison with Current Curriculum

CURRENT CURRICULUM

Master of Science		
DEGREE REQUIREMENTS		Credits
Master's Thesis		(Milestone)
AM8000	Master's Seminar	Pass/Fail
AM8101	Principles and Techniques in Applied Mathematics Part I	1
AM8102	Principles and Techniques in Applied Mathematics Part II	1
One Foundation Course		1
Two credits from Elective list or remaining Foundation Course		2
Foundation Courses		Credits
AM8001	Analysis and Probability	1
AM8002	Discrete Mathematics and its Applications	1
Electives		Credits
AM8201	Financial Mathematics	1
AM8202	Digital Signals and Wavelets	1
AM8203	Topics in Functional Analysis	1
AM8204	Topics in Discrete Mathematics	1
AM8205	Applied Statistical Methods	1
AM8206	Partial Differential Equations	1
AM8207	Topics in Biomathematics	1
AM8208	Topics in Mathematics	1
AM8209	Directed Studies in Math	1

PROPOSED CURRICULUM

Master of Science		
COMMON DEGREE REQUIREMENTS		Credits
AM8000	Master's Seminar	Pass/Fail
AM8101	Principles and Techniques Part I	1
AM8102	Principles and Techniques Part II	1
One Foundation Course		1
In addition to the above common degree requirements, the following are further requirements applicable to each of the two options.		
Thesis Option*		Credits
Master's Thesis		(Milestone)
Minimum of two credits from Elective list, remaining Foundation course or other approved graduate courses **		2
Major Research Paper Option*		Credits
Major Research Paper		(Milestone)

Minimum of six credits from Elective list, remaining Foundation course or other approved graduate courses **		6
Foundation Courses		
AM8001	Analysis and Probability	1
AM8002	Discrete Mathematics and its Applications	1
Electives		Credits
AM8201	Financial Mathematics	1
AM8202	Digital Signals and Wavelets	1
AM8203	Topics in Functional Analysis	1
AM8204	Topics in Discrete Mathematics	1
AM8205	Applied Statistical Methods	1
AM8206	Partial Differential Equations	1
AM8207	Topics in Biomathematics	1
AM8208	Topics in Mathematics	1
AM8209	Directed Studies in Math	1

*Students may only take at most one Directed Studies course during their academic career

**Other “approved graduate courses” refers to suitable graduate courses at Ryerson or other Ontario Universities, requiring approval from Graduate Program Director.

Remarks:

-The Thesis Option then requires the completion of five credit courses, the Seminar and the Thesis.

-The Major Research Paper Option then requires the completion of nine credit courses, the Seminar and the Major Research Paper.

**Ryerson University
Yeates School of Graduate Studies
Master of Science in Applied Mathematics**

Milestone: Major Research Paper

Calendar Description:

The Major Research Paper requires the completion of a research paper; the project selected must have the consent of the supervisor who will have the responsibility of guiding the student throughout the project. The paper should present a substantial amount of work reflecting a detailed understanding of the material. The student must submit the completed work to an Examination Committee who will evaluate the written work and an oral presentation in a Departmental seminar.

The Major Research Paper is a “milestone”, and, hence, is graded as pass/fail.

1. General Objectives

Students pursuing the Major Research Paper Option in the MSc Program in Applied Mathematics must complete a research paper based upon research in a topic within the scope of the MSc Program in Applied Mathematics at Ryerson.

2. Course Objectives

- Students will familiarize themselves with techniques and concepts in a specific research area of Applied Mathematics.
- To introduce students to independent research.
- To further develop students oral and written research presentation abilities.

3. Supervisor

The student will be assigned a research paper supervisor by or in consultation with the Graduate Program Director.

4. Procedures

- The student will select a project in consultation with the supervisor. The project selected must have the consent of the supervisor, who will have the responsibility of guiding the student throughout the research project resulting on a major research paper (for example, through regular meetings with the student).
- The student must complete a research paper on the topic chosen. The student and supervisor together must agree on the organization of the paper. Normally the paper will have an introduction, conclusion, and references and should present a substantial amount of work reflecting a detailed understanding of the material. The research paper should be written in such a way to be understandable to a general mathematical audience. While there is no expectation that original work will be included in the paper, it may be included where appropriate.
- The research paper will be evaluated by an Examination Committee selected by the Graduate Coordinator in consultation with the supervisor, which will normally consist of two faculty members including the supervisor. The student will present the research paper in a Departmental Seminar and make sure the written document is available well

before the presentation for people to peruse. The Examination Committee's responsibility is to evaluate the research paper on the basis of both the oral and written presentations resulting in a pass/fail grade.

- The examination Committee will provide feedback to the student on the corrections required to the research paper.
- The major research paper completion is recorded in a student's academic record (in RAMSS) when the student has submitted to the Program Administrator:
 - An electronic version of the corrected research paper.
 - The supervisor's verification of the major research paper completion.

3. PROFESSIONAL MASTER'S DIPLOMAS FRAMEWORK.

Motion

That Senate approve in principle the Proposal for a Framework for Professional Master's Diplomas as presented in the YSGS report dated September 18, 2012.

RYERSON UNIVERSITY
PROPOSAL FOR
A FRAMEWORK FOR
PROFESSIONAL MASTER'S DIPLOMAS
September 18, 2012

Table of Contents *

Acknowledgements.....	3
1. Executive Summary	4
2. Introduction	4
3. Curriculum Model, Admission and Completion Requirements	6
4. Academic Governance.....	7
5. Societal Need and Context	9
6. Comparator Programs	11
7. Conclusion.....	12

Appendices

- Appendix 1: Policy on Graduate Diplomas and Post-Secondary Certificates at the University of Toronto
- Appendix 2: Graduate Diplomas at York University
- Appendix 3: More Information on Comparator Programs

Sponsoring Deans

- Dr. Jennifer Mactavish, Dean, the Yeates School of Graduate Studies
- Dr. Jean-Paul Boudreau, Dean, Faculty of Arts
- Dr. Gervan Fearon, Dean, the G. Raymond Chang School of Continuing Education
- Dr. Usha George, Dean, Faculty of Community Services
- Dr. Gerd Hauck, Dean, Faculty of Communication and Design
- Dr. Ken Jones, Dean, Ted Rogers School of Management
- Dr. Mohamed Lachemi, Dean, Faculty of Engineering, Architecture and Science

Acknowledgements

- Dr. Anne-Marie Brinsmead, Program Director for Engineering, Architecture and Science, The G. Raymond Chang School of Continuing Education
- Desmond Glynn, Vice Chair of the Chang School Council and Program Director for Business Management
- Dr. Elaine Lam, Director, Business Development and Strategic Planning at The G. Raymond Chang School of Continuing Education
- Dijana Praskac, Research Analyst, The G. Raymond Chang School of Continuing Education
- Dr. Dagmar Rajagopal, Professor Emerita of Economics and former Academic Coordinator for Economics at The G. Raymond Chang School of Continuing Education
- Farheen Rashid, Graduate Programs Officer at The Yeates School of Graduate Studies

* Please Note TOC page numbers correspond to the original document

1. Executive Summary

This document outlines a proposed framework for professional master's diplomas to be offered by the Yeates School of Graduate Studies at Ryerson University. This proposal is focused on stand-alone diplomas and this framework will serve as a **guiding document** for future proposals for these diplomas. Individual diploma proposals will be developed in accordance with the administrative and governance framework of the University and will involve collaboration between the Yeates School of Graduate Studies and the relevant home Faculty and department(s)/program(s), with administrative support through the G. Raymond Chang School of Continuing Education (Chang School). Such proposals will be approved at the discretion of the Yeates School of Graduate Studies Council, the Chang School Council and Senate.

The designation "diploma" is used to ensure consistency with nomenclature of the Ontario Council of Graduate Studies, and the Ontario Universities Council on Quality Assurance (OUCQA). Moreover, the term differentiates the proposed offering from "graduate certificates," which are currently offered by a number of Ontario community colleges.

The framework is motivated by renewed interest amongst Ontario universities to establish Graduate Diploma Programs and to support the interest expressed by a number of faculty members to establish Graduate Diploma Programs here at Ryerson University. Recently, Deans of Graduate Studies across Ontario endorsed the importance of Graduate Diploma Programs in meeting demands—student driven, societal, and economic—for relevant, responsive, and accessible options in graduate education.

2. Introduction

How are graduate diplomas positioned within Canadian graduate education? A typical definition is found in York University's guidelines:

Graduate diploma is the term applied to a for-credit program of study at the graduate level, which is not itself a master's or doctoral program, in a specific area, topic or skill, and may be of a disciplinary or interdisciplinary character.¹

Such programs are incorporated in the governance framework for Ontario graduate programs. In line with the bylaws of the Ontario Council on Graduate Studies (OCGS), the Quality Assurance Framework for Ontario Graduate Programs developed by the new OUCQA states: "Universities may grant diplomas in acknowledgement of students' participation in either for-credit or not-for-credit activities at the undergraduate and graduate level."²

The OUCQA framework document goes on to define three types of graduate diplomas:³

- Type 1 diplomas are "awarded when a candidate admitted to a master's program leaves the program after completing a certain proportion of the requirements. Students are not admitted directly to these programs."
- Type 2 diplomas are "offered in conjunction with a master's (or doctoral) degree, the admission to which requires that the candidate be already admitted to the master's (or doctoral) program. This represents an additional, usually interdisciplinary, qualification."

¹ Appendix 2, page 2

² Ontario Universities Council on Quality Assurance, Quality Assurance Framework, 2011, <http://www.cou.on.ca/related-sites/the-ontario-universities-council-on-quality-assura.aspx>, page 4.

³ Ibid, pages 4-5.

- Type 3 diplomas are “a stand-alone, direct entry program, generally developed by a unit already offering a related master’s (and sometimes doctoral) degree, and designed to meet the needs of a particular clientele or market.”

Type 1 and 2 graduate diplomas may be characterized as inward facing and type 3 diplomas as outward facing. The proposed professional master’s diploma programs to be developed by the Yeates School of Graduate Studies and the relevant teaching department(s), with administrative support through the Chang School, will be outward facing, stand-alone type 3 diplomas.

Type 3 diploma programs do not require admission to a graduate degree program and may involve fewer than four full courses as a basis for the granting of a graduate diploma. They typically require the completion of an undergraduate degree prior to admission. Based on research undertaken on adult learners, there is a growing student demand for graduate diploma programs involving Faculties of Graduate Studies, and it is this type of structure we wish to pursue.

The OUCQA framework allows for the establishment of both master’s and PhD diploma programs, the framework we are proposing focuses on what will be referred to as “Professional Master’s Diplomas”.

Ryerson’s professional master’s diploma programs will be specifically oriented towards individuals who already possess an undergraduate degree and who are aiming to continue their education and professional development.⁴

The prospect of master’s diploma programs attracted considerable interest among Ryerson undergraduate program alumni.

3. Curriculum Model, Admission and Completion Requirements

The proposed curriculum model for graduate professional diplomas at Ryerson University is as follows:

3.1 Admission Requirements

- a. Students will be required to have completed an undergraduate degree to be admitted to a professional master’s diploma program.
- b. The admission grade point average (GPA) will normally be set at 3.0. The Yeates School of Graduate Studies may vary the GPA requirements in consultation with the home Faculty and department(s)/program(s).
- c. Students may be required to submit a portfolio, letter(s) of support, and/or a letter seeking exception as determined by the Yeates School of Graduate Studies in consultation with the home Faculty and department(s)/program(s).

⁴ In 2010, 56% of Ryerson’s certificate and returning students enrolled in classroom courses held a bachelor’s degree or higher; and this proportion rose to 63% in 2011. Furthermore, in 2011 only 4% of students enrolled in certificates were high school graduates or less (8% in the 2010 survey). Considering distance education students, 70% of respondents enrolled in a certificate program hold a bachelor’s, master’s or doctoral degree, a marked increase from 61% in 2010.

3.2 Professional Master's Diploma Structure

The professional master's diploma programs may be structured according to one of two options⁵.

Option 1:

- I. No less than four graduate courses (1 semester each).
- II. A practicum, placement or major paper.

Option 2:

- I.
 - a. No less than 2 graduate level courses (1 semester each)
 - b. No less than 2 senior level undergraduate courses (1 semester each)
- II. A practicum, placement; major paper and/or creative activity.

3.3 Transfer Credits

Successfully completed graduate courses in the diploma (to a maximum of two semester courses) may be considered eligible for credit transfer at the discretion of the Yeates School of Graduate Studies, if students subsequently apply for, and are admitted into, a related graduate degree program at Ryerson.

3.4 Professional Master's Diploma Delivery

Professional master's diplomas will be offered in a variety of formats:

- a. in-class format (using a combination of day, evening and weekend scheduling),
- b. hybrid format (blended delivery of in-class and online components), and
- c. online format.

3.5 Completion Requirements

The academic requirements for the completion of specific professional master's diplomas shall be determined by the Yeates School of Graduate Studies in consultation with the home Faculty and relevant department(s)/program(s).

4. Academic Governance

Professional master's diplomas will be governed by Ryerson's Institutional Quality Assurance policies and the collaborative governance model. These policies include, among others, 110, 112, 126, 127 and 142.

⁵ Graduate courses will be taught by faculty and/or instructors approved by the Yeates School of Graduate Studies and the associated Academic Faculty.

4.1 Diploma Proposal Development Process

4.1.1 Levels of Consultation

Proposed professional master's diploma letter of intent is presented to the Dean of the Yeates School of Graduate Studies, relevant Deans, including the designated Dean of Record for the proposal, School Director/Department Chair, and Graduate Program Director.

4.1.2 Diploma Curriculum Development

An Academic Coordination Committee, based in the home school/department, will oversee the development of the curriculum of the professional master's diplomas, as well as establish standards regarding the teaching and learning outcomes. The Academic Coordination Committee for each proposed professional master's diploma will comprise representatives from the Yeates School of Graduate Studies (at least two members of the School's Programs and Planning Committee) and the relevant Faculty or Faculties who are subject area experts. The administrative support and coordination for the Academic Coordination Committee will be provided by the Chang School. The relevant teaching department(s) will be requested to confirm in writing that the courses taught by the departments are available for inclusion in the diploma.

4.1.3 Yeates School of Graduate Studies Programs & Planning Committee (PPC)

Proposals for diploma programs as developed by the Academic Coordination Committee, with letters of support, will be presented to the Dean of the Yeates School of Graduate Studies, Dean of Record, and School Director/Department Chair, and Graduate Program Director for review. The proposal will then go to the PPC for consultation and review. Any recommendations will then go back to the Academic Coordination Committee for consideration.

4.1.4 Chang School Council

Once the proposal has been recommended by the Yeates School of Graduate Studies Programs and Planning Committee, a joint letter endorsement by the Dean of the Yeates School of Graduate Studies, Dean of Record, and Dean of the Chang School will accompany the proposal and be submitted to the Chang School Council for review and recommendations.

The minuted discussion by the Chang School Council regarding the proposal must be communicated to the Chair of the Yeates School of Graduate Studies Council.

4.1.5 The Yeates School of Graduate Studies Council

From the Chang School Council, the proposal will be submitted to the Yeates School of Graduate Studies Council for review and approval prior to being forwarded to the University's Senate. No master's diploma program will be forwarded to Senate without approval from the Yeates School of Graduate Studies Council and consultation with the Dean of Record, the Chang School, the relevant program Department Chair/School Director and the Graduate Program Director.

4.1.6 Ryerson University's Senate

All professional master's diploma proposals will be submitted to the University's Senate for review and approval.

4.2 Senate Approved Professional Master's Diplomas

All professional master's diplomas will require endorsement/approval from the Dean(s) of any Faculty or Faculties for which there are curriculum and/or resource implications.

All the courses of the professional master's diplomas will be the responsibility of the relevant teaching department(s) in coordination with the Yeates School of Graduate Studies and the Chang School. The relevant teaching department(s) will be requested to confirm in writing that (i) the courses taught by the departments are approved for inclusion in the diploma, and (ii) the courses which comprise the professional master's diploma will be taught regularly in coordination with the Yeates School of Graduate Studies and the Chang School.

The Quality Assurance Framework for Ontario Graduate Programs of OUCQA stipulates that proposals for new professional master's diplomas are subject to an expedited approval process which requires only their submission to the Appraisal Committee of the OUCQA, without the need for an external review. The Appraisal Committee will then report on the proposals to the OUCQA.⁷

5. Societal Need and Context

The Yeates School of Graduate Studies currently has no professional master's diploma program, even though these are available across many universities in Ontario and in other jurisdictions across Canada and the United States.

The proposed professional master's diploma programs will enable students to pursue significant employment opportunities by adding to the value of their degree and augmenting their professional knowledge and competencies. Students who already have a university degree look towards master's diploma programs as an appropriate and feasible way of continuing their education while often maintaining their professional career activities.

The main advantages of the proposed new professional master's diplomas are private (or individual), cultural and wider economic benefits. The economic benefits include the contribution such programming would make to the success of foreign trained professionals in the Canadian economy. Moreover, introducing a new credential ensures that Ryerson maintains its competitive position in the continuing education market. The rationale is further explained below.

The relationship between education and social well-being is clearly demonstrated in numerous studies. By and large, the impacts of education extend beyond private benefits to include social benefits as well. Higher education increases well-being, affects civic involvement and increases overall economic growth through the creation of knowledge. For example, the literature shows that post-secondary education is of great importance for explaining growth in OECD countries. Furthermore, higher education is associated with longer life expectancy, better health and reduced participation in crime (Riddell, 2004, pg 5).⁸

⁷ See op. cit. in footnote 1, pages 5 and 16.

⁸ Riddell, W. Craig, (November 2004). Social Benefits of Education: New Evidence on an Old Question. Paper prepared for the conference "Taking Public Universities Seriously", University of Toronto, December 3-4, 2004. Retrieved on 2 February 2012. Accessed at: <http://www.utoronto.ca/president/04conference/downloads/Riddell.pdf>

A study by Rauch (1993) found evidence that a higher average education level in cities is correlated with both higher wages of workers (even after controlling for the individual's own education) and higher housing prices.

The quantitatively most important effect [of education] is the impact of higher lifetime earnings on government tax receipts. In Canada, the modal marginal tax rate on university graduates - taking into account sales, excise and income taxes - is in excess of 50%. Thus each additional \$1,000 in earnings generates more than an additional \$500 in tax revenue. The tax revenue associated with higher earnings adds approximately two percentage points to the social benefits of higher education (Riddell, 2004, pg 46).

According to the report “Projections of Job and Education Requirements Through 2018”⁹ (US data shown for illustrative purposes), by 2018 the U.S. economy will create 46.8 million openings — 13.8 million brand-new jobs and 33 million “replacement jobs,” – and about 33% will require a bachelor’s degree or better.

Societal need is further demonstrated in the case of foreign trained professionals seeking routes to new or better suited credentials.

Ferrer and Riddell (2008)¹⁰ found that *for recent immigrants the increase in earnings associated with completing educational programs is generally higher than that of comparable other people. University degrees increased the earnings of recent immigrants by 27%, compared to 20% for others. Furthermore, degrees seem to greatly influence the assimilation process of recent immigrants. However, anecdotal evidence indicates that recent immigrants are often at a disadvantage compared to others who are similarly educated.* Both results suggest that the human capital of recent immigrants may be underutilized.

Over 280,000 people immigrated to Canada in 2010, of whom nearly 187,000 were economic immigrants. Individuals who arrived in 2010 as economic immigrants were highly educated – 71% held a bachelor’s, master’s or doctoral degree (Facts and Figures 2010, pg 43).¹¹ These findings indicate that the higher education and training options for this segment of the population need to match the level of the segment’s prior educational attainments.

A recent report “Protecting our Most Valuable Resource”, published by the Ontario Chamber of Commerce (2011), states: *Economists now conclude that human capital - the ideas, skills, and expertise of people - is a fundamental driver of economic growth. Demand for employees that possess a mix of both “hard” and “soft” skills is rising as companies respond to intensified global economic competition. In response to the emergence of knowledge as a key factor of economic growth, employers have begun to place a greater emphasis on the skills and education of the workforce.*

In other words, future economic growth and innovation in the province have to be driven by a highly trained workforce.

Finally, it has to be stressed that over time, occupations in general are steadily requiring more advanced levels of education. Statistics Canada’s Fact Sheet, “Educational Attainment and

⁹ Accessed on 2 February, 2012 at: <http://www9.georgetown.edu/grad/gppi/hpi/cew/pdfs/FullReport.pdf>

Ferrer, Ana and Riddell, W. Craig (February 2008). Education, Credentials, and Immigrant Earnings. Canadian Journal of Economics, Vol. 41, Issue 1, pages 186-216, February 2008. Available at SSRN: <http://ssrn.com/abstract=1082606> or doi:10.1111/j.1365-2966.2008.00460.x

¹⁰ Ferrer, Ana and Riddell, W. Craig (February 2008). Education, Credentials, and Immigrant Earnings. Canadian Journal of Economics, Vol. 41, Issue 1, pages 186-216, February 2008. Available at SSRN: <http://ssrn.com/abstract=1082606> or doi:10.1111/j.1365-2966.2008.00460.x

¹¹ Canada Facts and Figures. Immigration Overview Permanent and Temporary Residences 2010. Citizenship and Immigration Canada. Available at: <http://www.cic.gc.ca/english/resources/statistics/facts2010/index.asp>

Employment”, reports that between 1999 and 2009, the proportion of adults aged 25 to 64 with tertiary education in Canada increased from 39% to 50%. The 2009 data show that one quarter (28% in Ontario) of all individuals aged 25 to 64 in Canada hold a university degree (bachelor’s, master’s or PhD). Over 80% of continuing education students at Ryerson already have some post-secondary education, and 56% have a bachelor’s or higher degree. In Canada, approximately one quarter of 25 to 64 year-olds participate in some form of non-formal job-related continuing education training (OECD, 2007). A study by Adamuti-Trache and Schuetze (2008)¹² examined a cohort of 97,250 graduates of whom about 30% were above 25 years of age at the time of their graduation. More than two thirds of the ‘under 25’ (68%) and 56% of the ‘over 25’ graduates had engaged in some organized continuing education activity.

With 56% of its population holding a college or university credential, Ontario was the leader in terms of post-secondary attainment among the provinces and territories, as well as in comparison with the 12 OECD countries examined in this report.

Ideally, Canadian educational institutions need to adjust their programming in view of the population’s demographic shifts and create a market-driven competitive offer in terms of academic content and the level of study. Undergraduate-level certificates, although still high in demand within some demographic groups, are increasingly diminishing in value for highly educated professionals.

Currently, a number of certificate programs at Ryerson require students to have an undergraduate degree for admission. Several departments offering such certificates wish to offer graduate diplomas instead of advanced undergraduate certificates, since the label “graduate diploma” is received as a more favorable credential by students and employers.

6. Comparator Programs

Graduate diploma programs are common across universities in Canada and the USA to support students who have obtained their bachelor’s degrees and wish to obtain an additional credential. Many are typically structured to support specialized learning independent of other graduate programs, often in professional or career-oriented areas which offer skills-based courses, provide advanced disciplinary background, high-level skills development and knowledge in specific areas, e.g., legal, regulatory, policy, management, etc. Such career-oriented graduate level programs have assumed an increasingly prominent role in preparing students to secure professional positions that offer career entry and advancement potential. The professional master’s diploma envisioned in this framework proposal will be consistent with Ryerson’s mission to provide continuing professional education, career preparation and accessibility and to do so predominantly at the graduate level, rather than post-secondary degree level.

A sample of Ontario universities reveals that the University of Guelph has eight graduate diplomas, McMaster University seven, the University of Toronto six (with some additional programs offered through faculties as opposed to Graduate Studies), and Waterloo seven. Outside of Ontario, McGill University has about 33, the University of Wisconsin at Madison has 21, and New York University (NYU) has 12. Graduate diplomas are offered through or in conjunction with Continuing Education Departments at McGill, Wisconsin-Madison, and NYU.

Universities in Canada and the USA have established graduate diploma programs that are offered to students already admitted to a graduate program (i.e., type 1 and type 2 inward facing

¹² Adamuti-Trache, M. and Schuetze, H.G. (2008). Demand for University Continuing Education by University Graduates. Prepared for: Canadian Association for University Continuing Education. Retrieved at: http://www.cauce-aepuc.ca/documents/Research%20report_Schuetze_Jan%2009.pdf

graduate diplomas), or stand-alone, direct-entry programs offered to students with at least an undergraduate degree (i.e., type 3 outward facing graduate diplomas). An example of the latter type of program is Queen's University's Graduate Diploma in Accounting, which does not require admission to the graduate degree program in accounting.

The University of Toronto's Policy on Graduate Diplomas and Post-Secondary Certificates stipulates that graduate diploma programs "require completion of an undergraduate or graduate degree for admission, comprise a coherent sequence of courses, provide for a mechanism of assessment of student performance", ... and "may include courses offered for credit in a graduate degree program, for which credit may be transferred if the student enrolls in the degree program."¹³ For a list of graduate diplomas at the University of Toronto and more information about them, please see Appendix 1.

At York University, "the minimum requirement for the diploma will normally be the equivalent of two full graduate courses,"¹⁴ or four half graduate courses. Appendix 2 provides more information about graduate diplomas at York University. Additional information on comparator programs is given in Appendix 3.

The University of Ontario Institute of Technology's administrative framework for Graduate Diploma programs also provides a structure for the programs. It is included in Appendix 4.

In assessing the draft framework for graduate diplomas in relationship to these comparator graduate diploma programs, the proposed curricular structure for graduate professional diplomas at Ryerson University provides academic depth and breadth, as well as flexibility with respect to the mix of graduate and undergraduate courses that the Yeates School of Graduate Studies and the home Faculty and department(s)/program(s) may prefer for any future graduate diplomas.

7. Conclusion

This proposed framework for professional master's diplomas to be offered collaboratively at Ryerson University has as its primary focus the development and implementation of type 3 outward facing, stand-alone diplomas.

¹³ Please see Appendix 1.

¹⁴ Please see Appendix 2, page 2.

APPENDIX 1
Policy on Graduate Diplomas and
Post-Secondary Certificates at the
University of Toronto

University of Toronto, Policy on Graduate Diplomas and Postsecondary Certificates

UNIVERSITY OF TORONTO

Policy on Diploma and Certificate Programs

1. Objective:

- a) to ensure consistency in the use of the terms “diploma program” and “certificate program” across the divisions of the University of Toronto, in order that their meaning be clear to students, employers and the general public.
- b) to ensure appropriate standards of quality in diploma and certificate programs.
- c) to ensure that the resource implications of diploma and certificate programs are appropriately addressed.
- d) to establish a categorization of diploma and certificate programs, and an approval process appropriate to each category.

2. Application:

This policy applies to all courses of study leading to the conferral of a form of certification other than a degree.

3. Categories:

a) Diploma programs:

- require completion of an undergraduate or graduate degree for admission¹.
- comprise a coherent sequence of courses.
- provide for a mechanism of assessment of student performance.
- students are registered as University of Toronto students, and receive diplomas at Convocation.
- may include courses offered for credit in a graduate degree program, for which credit may be transferred if the student enrolls in the degree program.

b) Post-secondary certificate programs²:

- require completion of secondary school as a condition of admission.
- comprise a coherent sequence of courses.
- provide for a mechanism of assessment of student performance.
- students are registered as University of Toronto students, and receive diplomas at Convocation.
- may include courses offered for credit in an undergraduate degree program, for which credit may be transferred if the student enrolls in the degree program.

¹ Diploma programs are typically offered in specialized professional areas, with content different than that expected in a graduate degree program. A list of diploma programs currently offered is appended to this policy.

² Several such certificate programs are currently offered at the University, as indicated in the attached list. The University does not anticipate a significant expansion of this type of academic programming.

c) Diploma and Certificate programs offered in conjunction with degree programs:

- Diploma programs may be offered in conjunction with a graduate degree. Students must be admitted to the graduate degree program in order to qualify for such diploma programs.
- Certificate programs may be offered in conjunction with an undergraduate degree. Students must be admitted to the undergraduate degree program in order to qualify for such diploma programs.
- The content of the diploma or certificate program should complement that of the respective degree program.
- Completion of such diploma and certificate programs is to be recognized through an appropriate form of attestation by the division offering the program; students do not receive diplomas at Convocation.

d) Certificate programs in continuing education:

- open admission, but may be targeted to particular professional and quasi-professional areas³.
- comprise a coherent sequence of courses.
- credit may not be transferred to degree programs.
- students are not registered as University of Toronto students, and do not receive diplomas at Convocation.

4. Program Nomenclature:

a) Divisions wishing to offer a form of certification to recognize the completion of a course of study other than a degree program shall normally use the following terms:

- “diploma” for programs as defined in 3(a) and 3(c).
- “certificate” for programs as defined in 3(b) and 3(c).
- “certificate in continuing studies” or “certificate in continuing education” for programs as defined in 3(d).
- with the approval of the Provost, terms such as “certificate in professional development” or “certificate in executive development” for programs as defined in 3(d) as consistent with program content and clientele.

b) In exceptional circumstances, the terminology prescribed in 4(a) may be varied to align program nomenclature at the University of Toronto with that in peer institutions offering similar programs, or with that in common use in a given professional or quasi-professional area.

³ In some cases these programs may be designed to fulfill the requirements of external professional, quasi-professional or other organizations.

5. Approval criteria:

Programs must meet the following criteria:

a) quality control:

- for programs in categories 3(a), 3(b) and 3(c) curriculum and instructors must be approved through an established process involving full-time faculty at the divisional 4 level; and a process for periodic review must be in place. Programs in category 3(c) should be reviewed in conjunction with the relevant degree program.
- for programs in category 3(d), curriculum and instructors must be approved by the academic head of the division.

b) institutional fit: the program should draw upon established strengths of the sponsoring unit.

c) student demand: the program should respond to an identified student demand.

d) resource implications: certificate programs in continuing education (category 3d) must be self-funding.

6. Level of approval by University governance:

a) programs in categories 3(a), 3(b) and 3(c) require approval by the relevant divisional council⁴ and by the Committee on Academic Policy and Programs. For programs without resource implications for the University's operating budget, no further approval is required.

b) programs in category 3(d) must be approved by the relevant divisional council and reported for information to the Committee on Academic Policy and Programs.

c) for programs in categories 3(a), 3(b) and 3(c) any resource implications for the University's operating budget must be reviewed by the Planning and Budget Committee and approved by Governing Council as necessary.

7. Other academic activities:

a) Auditing of courses may be allowed by a division as provided for in the University's Policy on Auditing of Courses. Certificates of Attendance may be issued by the division as provided by that Policy.

b) Certificates of Attendance or Certificates of Completion may be issued by divisions to recognize other continuing education activities, provided that the certificate makes it clear what is being signified – for example, attendance at a course or workshop (specifying the length), passing of an examination, etc.

c) Credit for audited courses or other continuing education activities may not be transferred to degree programs.

November, 2003

⁴ For diploma programs, the relevant division is the School of Graduate Studies.

Current Graduate Diplomas and Certificates at UofT

Faculty of Applied Science and Engineering

Professional Pilot and Aviation Management Diploma - Dip.P.P.A.M.

Faculty of Information Studies

Graduate Diploma of Advanced Study in Information Studies - G.Dip.ISt.

Faculty of Medicine

Diploma in Child Psychiatry - D. Child Psych.

Diploma in Clinical Chemistry - D. Cl. Chem.

Diploma in Clinical Epidemiology - D.C.E.

Diploma in Community Health

Diploma in Health Administration - D.H.Ad.

Diploma in Industrial Health - D.I.H.

Diploma in Ophthalmic Science - D.Oph.Sci.

Faculty of Music

Advanced Certificate in Performance - Adv. Cert. Perf.

Diploma in Operatic Performance - Dip. Op. Perf.

(Operatic Repetiteur)

(Stage Director)

Faculty of Nursing

Post Master's Nurse Practitioner Diploma - Dip.N.P.

OISE/UT

Diploma Program in Holocaust & Genocide Education - D.H.G.E.

Joseph L. Rotman School of Management

Diploma in Investigative & Forensic Accounting - D.I.F.A.

January 2004

Current Undergraduate and First Professional Diplomas and Certificates at UofT

Faculty of Dentistry

Certificate of Qualification in Dentistry - Cert.Q.P.Dent.

Faculty of Music

Artist Diploma - Art. Dip. Mus.

Faculty of Nursing

Certificate as a Nurse Practitioner (Primary Health Care) - Cert. N.P. (PHC)

OISE/UT

Diploma in Technical Education - Dip. T. Ed.

University of Toronto at Scarborough

Certificate in Business - Cert. Bus.

Woodsworth College

Certificate in Human Resource Management - C.H.R.M.

Certificate in Teaching English as a Second Language - C.T.E.S.L.

January 2004

APPENDIX 2
Graduate Diplomas at York University

Graduate Diplomas Definition, Categories and Proposal Template

Definition

Graduate diploma is the term applied to a for-credit program of study at the graduate level, which is not itself a master's or doctoral degree program, in a specific area, topic or skill, and may be of a disciplinary or interdisciplinary character.

To be eligible for admission to a graduate diploma taken concurrently with a graduate degree program, candidates must meet or surpass the minimum requirements for the degree type stipulated by the Faculty of Graduate Studies as well as any other requirements specified by the program and graduate diploma to which they are applying.

To be eligible for admission to a stand-alone, direct-entry graduate diploma, candidates must meet or surpass the minimum requirements for admission to master's programs in the Faculty of Graduate Studies as well as any other requirements specified by the graduate diploma to which they are applying.

The minimum requirements for the graduate diploma will normally be the equivalent of two full graduate courses.

Types of Graduate Diplomas

There are three types of graduate diplomas:

Type 1: Awarded when a candidate admitted to a master's program leaves the program after completing a certain proportion of the requirements. Students are not admitted directly to these programs.

Type 2: Offered in conjunction with a master's or doctoral degree, the admission to which requires that the candidate be already admitted to the master's (or doctoral) program. This represents an additional, usually interdisciplinary, qualification. Courses taken in fulfilment of degree requirements may count towards the graduate diploma, but some part of the graduate diploma requirements shall be additional to degree requirements. All the requirements for the degree as well as for the graduate diploma must be fulfilled before the graduate diploma is awarded. Normally, the graduate diploma will be awarded at the convocation at which the degree is awarded. However, students may be permitted by Graduate Diploma Coordinators to complete requirements in one additional term following the award of the degree, and receive the graduate diploma at the next convocation.

Type 3: A stand-alone, direct-entry program, generally developed by a unit already offering a related master's (and sometimes doctoral) degree, and designed to meet the needs of a particular clientele or market.

(Note: Type 3 defined above incorporates both Types 3 and 4 as defined in previous OCGS procedures.)

Graduate Diploma Proposal Guidelines

1. Introduction

- 1.1 Provide a brief statement of the graduate diploma being proposed, including type, and indicate the parent program and/or unit in which the graduate diploma will be administratively housed.
- 1.2 Comment on the appropriateness and consistency of the graduate diploma name with current usage in the discipline or area of study, as appropriate.
- 1.3 For Type 1 graduate diplomas, identify the master's program to which a student must have been admitted to and registered in order to be awarded the graduate diploma. For Type 2 graduate diplomas, identify the master's and PhD programs the graduate diploma may be awarded in conjunction with.

2. General Objectives of the Graduate Diploma

- 2.1 Provide a brief description of the general objectives of the graduate diploma.
- 2.2 Describe how the general objectives of the graduate diploma align with University and Faculty missions and academic plans.
- 2.3 For Type 1 and Type 2 graduate diplomas, describe the relevance of the graduate diploma to the degree program(s) involved.

3. Need and Demand

- 3.1 Comment on similar graduate diplomas offered at York and/or by other Ontario universities, with special attention paid to any innovative and distinguishing aspects of the proposed graduate diploma.
- 3.2 Provide brief description of the need and demand for the proposed graduate diploma, focusing as appropriate on student interest, social need, potential employment opportunities for graduates, and/or needs expressed by professional associations, government agencies or policy bodies.
- 3.3 Comment on the projected in-take into the graduate diploma, including the anticipated implementation date (i.e. year and term of initial in-take) and steady-state enrolment.

4. Curriculum, Structure and Learning Outcomes

- 4.1 Describe the graduate diploma requirements and associated learning outcomes, including explicit reference to how the diploma curriculum and structure supports achievement of the learning outcomes. For Type 2 graduate diplomas, identify and describe the graduate diploma requirements that are additional to the degree program requirements, and comment on the appropriateness of the graduate diploma as an additional qualification. For Type 3 graduate diplomas, explain how the curriculum and learning outcomes are consistent with master's degree level expectations.
- 4.2 Address how the methods and criteria for assessing student achievement are appropriate and effective relative to the diploma learning outcomes.
- 4.3 Provide a list of courses that will be offered in support of the graduate diploma. The list of courses must indicate the unit responsible for offering the course (including cross-lists and

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

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

5. Admission Requirements

5.1 For Type 1 and Type 2 graduate diplomas, identify the graduate program(s) students must be admitted to and registered in order to pursue the proposed diploma. If appropriate, indicate any admission requirements for the graduate diploma that are additional to those of the relevant graduate program(s). For Type 3 graduate diplomas, describe the admission requirements. For all types, address how the admission requirements are appropriately aligned with the diploma learning outcomes.

6. Resources

6.1 Faculty resources: Comment on the expertise of the faculty who will actively participate in delivering the graduate diploma, focusing on its current status, as well as any plans in place to provide the resources necessary to implement and/or sustain the graduate diploma. Provide a Table of Faculty, as follows:

Faculty Member & Rank	Home Unit	Primary Graduate Program	Area(s) of Specialization

Note: Up-to-date CVs of faculty who will actively participate in delivering the graduate diploma must be included as an appendix.

6.2 Laboratory facilities: As appropriate, identify major equipment that will be available for use by students engaged in the graduate diploma.

6.3 Space: As appropriate, provide information on the office, laboratory and general research space available that will be available by students engaged in the graduate diploma.

7. Support Statements

- from the relevant Dean(s)/Principal, with respect to the adequacy of existing human (administrative and faculty), physical and financial resources necessary to support the graduate diploma, as well as the commitment to any plans for new/additional resources necessary to implement and/or sustain the graduate diploma
- from the Vice-President Academic and Provost, with respect to the adequacy of existing human (administrative and faculty), physical and financial resources necessary to support the graduate diploma, as well as the commitment to any plans for new/additional resources necessary to implement and/or sustain the graduate diploma
- from the University Librarian confirming the adequacy of library holdings and support

- from the University Registrar confirming the implementation schedule and any administrative arrangements
- from the relevant Faculties/units/programs confirming consultation on/support for the proposed graduate diploma, as appropriate
- from professional associations, government agencies or policy bodies with respect to the need/demand for the proposed graduate diploma, as appropriate

APPENDIX 3
More Information on Comparator Programs

Institution	Program		Duration/Format	Cost	Features/ Distinction	Admission Requirements	Website
	Diploma/ Certificate						
University of Guelph*	Bioinformatics	D	Each diploma program requires a minimum of 2 credits (4 courses) to complete	The cost of the programs vary, but averaging around \$3000 for the entire diploma	Each program has a brochure. Each program offers various financial aid and scholarship options	Various. Min. Req.: Applicants must be have B- to honours average in the last 2 years of undergraduate from fields selected by the department at least 28 credits	http://www.uoguelph.ca/registrar/graduatestudies/index.cfm?app=programs
	Clinical Studies	D					
	Engineering of Sustainable Water Resource Systems	D					
	Environmental Studies	D					
	Food Safety & Quality Assurance	D					
	Market Research	D					
	Modelling Applications in Water Resources Engineering	D					
*there are about 90 graduate program, 8 of which are diplomas	Pathobiology	D					

Institution	Program		Duration/Format	Cost	Features/ Distinction	Admission Requirements	Website
	Diploma/ Certificate						
McMaster University*	Advanced Neonatal Nursing	D	Each diploma program requires 3-4 courses to complete. The diplomas mostly require for students to be enrolled in graduate program already.	Most programs have either no additional cost for registration or very minimal addition to the cost of graduate tuition. The tuition for graduate programs are around 3-4000	Graduate diplomas are supplementary to a graduate degree at McMaster, they act as an specializations	admission to graduate program with letters of recommendations	http://graduate.mcmaster.ca/prospective-students/programs-offered/diplomas
	Gender Studies and Feminist Research	D					
	Health Services and Policy Research	D					
	Management of Innovation & New Technology	D					
	Nuclear Technology	D					
	Spatial Analysis and GIS	D					
*there are 7 graduate diplomas offers in different departments	Steel Processing and Manufacturing	D					
	Water Without Borders	D					

Institution	Program		Duration/Format	Cost	Features/ Distinction	Admission Requirements	Website
	Diploma/ Certificate						
University of Toronto*	Advanced Study in Information Studies	D	8 courses 6 from master's of information	Regular graduate studies fees apply \$6885	majority of program require a master's degree and professional experience for admission	MI, MISt, MIS or MLS required with B- average	http://www.gradschool.utoronto.ca/programs/Diploma_Programs.htm
	Community Health	D	3.5 courses			70% completion of MScCH program	
	Diploma in Anesthesia Care	D	4 courses			Must hold a Master's of Nursing, must be registered or able to register to college of nurses of Ontario	
	Investigative & Forensic Accounting	D	10 courses primarily on Distance ed and 2 weeks of residency	10-12K per academic year		bachelor degree with B average, 2 years of experience and 2 letters of rec.	
	Post Master's Nurse Practitioner	D	4 courses	Regular graduate studies fees apply \$6885		master's degree in nursing, 2 years of experience	
	Social Services Administration	D	6 courses			master's degree in social work, 3 years of experience	

Institution	Program		Duration/Format	Cost	Features/ Distinction	Admission Requirements	Website
	Diploma/ Certificate						
Waterloo University*	Electric Power Engineering	D	6 courses in e- learning	Regular graduate program tuitions apply \$1364	industry oriented	Bachelors with B+ average in the final 2 years of study	http://www.grad.uwaterloo.ca/students/prospective/programs.asp
	Advanced Management	D	6 Courses				
	Social Innovation	D	4 in-person modules	\$15000 per participant	There is bursary option available for the first year of the program that is max of 12,000 also this program requires 3 years of experience for admission		
	Software Engineering	C	2 compulsory and 3 electives	Regular graduate program tuitions apply \$1364	As part of the MEng degree, students can also enrol and obtain graduate certificates		
Computer Networking and Security	C	3 compulsory and 2 electives					
			Sustainable Energy			C	2 compulsory and 3 electives
	Management Sciences	C	3 Electives				

*There are 3 diploma programs and 4 certificate programs available, if participants fail to finish diploma programs, a certificate of completions for the completed courses is issued.

Institution	Program		Duration/Format	Cost	Features/ Distinction	Admission Requirements	Website
	Diploma/ Certificate						
McGill University*	Accounting	C	<p>Certificates are typically 15- 16 credits, which translates to about 4 to 5 courses delivered in variety of methods</p> <p>Diplomas are typically 30 credits which translates to about 10 courses</p>	<p>Certificates typically cost about \$1600 based on a \$325 cost per course</p>	<p>Variety of certificates and diplomas. Programs are mostly taught by industry professionals with use of real life cases and experiences, They are designed to give an edge to the graduating student</p>	<p>The admission requirements for programs offered through the School of Continuing Studies vary. Please consult the appropriate academic area for the admission requirements for the program to which you would like to apply.</p>	<p>http://www.mcgill.ca/study/2011-2012/programs/search/?filters=language%3Aen%20ss_faculty%3ACE</p>
	Public Relations Management	C					
	Chronic Pain Management	C					
	Operations Management	C					
	Taxation	C					
	Educational Leadership 2	C					
	Marketing	C					
	Leadership	C					
	Counselling Applied to teaching	C					
	Internet Business	C					
	International Business	C					
	Health Care Management	C					
	Entrepreneurship	C					
	Comparative Law	C					
	Theory in Neonatology	C					
	Human Resource Management	C					
Air and Space Law	C						
Theory in Primary Care	C						

	Teaching English as a Second Language	C				
	Educational Leadership 1	C				
	Library and Information Studies	C				
	Biotechnology	C				
	Assessing Driving Capabilities	C				
	Bioinformatics	C				
	Professional Communication - Spanish	C				
	Treasury	C				
	Bioresource engineering - Integrated water resources Management	C				
	Primary Nurse Practioner	D				
	Library and Information Studies	D				
	Translation - Spanish to English	D				
	Translation - Spanish to French	D				
*There are many graduate certificate programs and several diplomas	Translation - English to French	D				
	Translation - French to English	D				
				Diplomas work on the same cost as a certificate and costs about \$325 per course		

Institution	Program		Duration/Format	Cost	Features/ Distinction	Admission Requirements	Website
	Diploma/ Certificate						
Queen's University	Accounting	D	4 courses taken over 12 week period	\$150 per course or \$500 for entire program	The program is designed to deepen knowledge of accounting and taxation	A bachelor's degree with emphasis in accounting is required	http://business.queensu.ca/grad_studies/ggda/index.php
University of Wisconsin - Madison	African Studies	C	Typically 12-13 credit curriculum which translates to about 3-4 courses	Typically for 12-13 credit program, students should expect about \$4000 as resident and \$10,000 as non resident in the state of Wisconsin	2 types – one for those already enrolled in the University at a graduate level and those who are new students who want to 'cap-off' their undergrad studies and take something more specialized	Bachelor degree is required for new students who are interested in the certificate and enrolment in a bachelor program is required for those who look to specialize in particular field in their studies	http://www.grad.wisc.edu/education/academicprograms/index.html
	Air Resources Management	C					
	Bioinformatics	C					
	Consumer Health Advocacy	C					
	Culture, History and Environment Educational Leadership and Policy Analysis	C					
	Energy Analysis and Policy European Studies	C					
	Gerontology	C					
	Global Health	C					
	Library and Information Studies	C					
	Human and the Global Environment	C					
	Material Culture Studies	C					

Medieval Studies	C
Patient Safety Prevention and Intervention Science	C
Russian East European, and Central Asian Studies	C
Southeast Asian Studies	C
Teaching and Learning Scholarship in Higher Education	C
Teaching English to Speaker of Other Languages	C
Technical Communication	C
Transportation Management and Policy	C
Type 2 Translational Research	C
Women's Studies at Graduate Level	C

Institution	Program		Duration/Format	Cost	Features/ Distinction	Admission Requirements	Website
	Diploma/ Certificate						
New York University*	Benefits and Compensation	C	Different certificates and diplomas have a variety of requirement for completion, including the number of courses and credits to be completed. Typically around 5-6 courses of 3 credits each. Some courses and programs can be taken fully through distance ed. There is also an in-class and hybrid format as well.	Costs for each program are variable depending on the required courses for graduation. Tuition is about \$4500 per 3 credits	With a wide variety of programs, NYU distinguishing factor is its wide niche and customer base. NYU calls its programs certificates in general	admissions require a personal statement, resume, GRE score and previous academic records GPA of 3.0 is recommended	http://www.scps.nyu.edu/academic-programs/graduate-programs/
	Core Business Competencies	C					
	Enterprise Risk Mgmt	C					
	Human Resource Management	C					
	information Technologies	C					
	Organizational and Executive Coaching	C					
	Strategy and Leadership	C					
	Hospitality Industry Studies	C					
	Sports Business	C					
	Tourism Mgmt	C					
*There are about 12 graduate certificate programs	Construction Management	C					
	Real Estate	C					