REPORT TO ACADEMIC COUNCIL, NOVEMBER 2, 2004

SCHOOL OF GRADUATE STUDIES

1. The School of Graduate Studies has reviewed the proposal for an *MA in Early Childhood Studies* listed below, and submits it to Academic Council for its approval for it to be sent to the Ontario Council on Graduate Studies for external review ('standard appraisal'). Vol. I of the brief ('The Program') is available for review in the office of the Secretary of Academic Council, and Volumes I & II ('The Program', and 'Curricula Vitae') are available for review in the office of the Dean of the School of Graduate Studies (EPH 439). Vol. I of the brief ('The Program') is also available for review at www.ryerson.ca/gradstudies/temp. Username: gradstudies Password: 4ryerson

It is planned that the MA in Early Childhood Studies will be implemented in Fall 2006.

Motion

To approve the submission of the proposal for an MA in Early Childhood Studies to the Ontario Council for Graduate Studies for Standard Appraisal.

Note: Once a program is approved by OCGS, it is presented to the Board of Governors for approval. The Provost has final authority to determine whether a program may proceed.

RYERSON UNIVERSITY Early Childhood Studies (MA) SUMMARY

Ryerson University proposes to establish a Master's in Early Childhood Studies (MECS) that will be a high quality program to prepare students for advanced practice and study in the fields of education and community. The proposed program is presented in recognition of the need for a master's level program in the field of early childhood studies that would build on Ryerson's unique undergraduate program. The focus of the proposed program is specifically on issues of diversity and inclusion in the field of early childhood studies with an emphasis on children and their families. This program would offer a solid research-oriented graduate program in early childhood studies and would prepare students for research, for work in the field, or both.

Ryerson University provides an excellent home for a MECS with a concentration on issues of diversity and inclusion. The immigrant population in Canada, and the rest of the world, is increasing at a rapid rate, and the city of Toronto houses the largest percentage of this immigrant population. In 2001, immigrants comprised 43.7% of the Toronto Census Metropolitan Area (CMA). This high immigrant influx is evident not only in the major cities such as Toronto, Vancouver, and Montreal but also in mid-sized cities such as Hamilton, Victoria, and London. Developing a program that specifically addresses Canada's diversity is critical to the healthy integration and academic success of the children of these immigrants. Ryerson University possesses the faculty complement, as well as the institutional and community ties, required to launch an MA Program in Early Childhood Studies.

The program meets all of the conditions outlined in Ryerson's academic plan for graduate studies. The program: has a particular focus on societal need, career/professional relevance; is designed to provide students with innovative, applied curriculum and research opportunities; builds on established strengths of the university and contributes to the university's strategic goals; has high potential to contribute to both scholarly research and undergraduate program strength (including increasing the number and quality of research proposals; generate new opportunities for graduate

and undergraduate students to be involved with scholarly research projects; and increase the number of research partnerships within Ryerson and with external organizations); will not place undue financial burdens on the University; will be a major factor in attracting and retaining faculty; and will allow the School of Early Childhood Education to build research capacity through the program requirements and by supporting graduate students financially as Research Assistants on faculty research projects.

The program is designed for both full-time and part-time studies and anticipates accepting its first cohort of students in September of 2005 (15 full-time students and 15 part-time students). The flexibility of the program is designed to allow students to customize their studies depending on their own educational goals, personal circumstances and work contexts.

The requirement for the MA degree in Early Childhood Studies is the successful completion of 7 courses: four required courses and three elective courses. The program includes a Major Research paper (3 course equivalents). Depending on the path of study, the program is designed to be completed by both part and full-time students in 12-24 months and must be completed within six years of enrolment. Applicants must meet normal requirements for admission to the Ryerson School of Graduate Studies as well as an undergraduate course in Research Methods.

Course Curriculum:

Required Courses	Elective Courses *		
Research Methods in Early Childhood Studies	Implications of Educational Change for Learners		
(Fall)	from Diverse Backgrounds		
Theoretical Frameworks for Childhood Studies	Achieving Social Justice in Education		
(Fall)			
Curriculum Development in a Changing Society	Special Needs across Diverse Populations: Issues in		
(Spring)	Assessment and Pedagogy		
Families and Educational Equity (Spring)	Multiage Groupings in Early Education		
Major Research Paper (Spring/Summer)	Statistics		
	Risk and Resilience among Children and Families		
	Social and Political Contexts for Early Childhood		
	Professionals		
	Transformative Literacy: Critical Pedagogy in		
	Action		
	Linguistic Issues of Minority Language Children		
	Social Policy and Early Childhood Education		
	Policy Issues Related to Immigrant and Refugee		
	Children		

^{*} It is recognized that not all elective courses will be offered in a given academic year but rather three in the fall and two in the spring. The current list may be expanded as enrolments increases, the program develops and new faculty or adjunct faculty become involved with the program.

As the program reaches a steady state, additional elective courses would be developed and the potential for developing electives that may be of interest to students in several graduate degrees at Ryerson would be explored.

Eighteen faculty members will be part of the program. Faculty participants come from five disciplinary areas: 1) early childhood education; 2) sociology; 3) political science; 4) psychology; and 5) child and youth care. Out of the total of eleven faculty members from the Ryerson School of Early Childhood Education, nine will participate in the proposed Master's Program. Eight further members of the proposed program will be from departments

corresponding to the remaining four disciplines cited. The core faculty have recognized research and practice expertise, as well as publication records. The reputation of faculty members in each field would attract students for graduate study. Ongoing research in these fields is supported by various funding agencies including SSHRC, HRDC, CERIS and several national foundations and agencies.

2. The School of Graduate Studies has reviewed the proposal for a *PhD in Chemical Engineering* listed below, and submits it to Academic Council for its approval for it to be sent to the Ontario Council on Graduate Studies for external review ('standard appraisal'). Vol. I of the brief ('The Program') is available for review in the office of the Secretary of Academic Council, and Volumes I & II ('The Program', and 'Curricula Vitae') are available for review in the office of the Dean of the School of Graduate Studies (EPH 439). Vol. I of the brief ('The Program') is also available for review at www.ryerson.ca/gradstudies/temp. Username: gradstudies Password: 4ryerson

Please see attached Appendix A: Status of New Programs in Graduate Review Process (as of October 19, 2004, for programs planned for September, 2005).

Motion

To approve the submission of the proposal for a *PhD in Chemical Engineering* to the Ontario Council for Graduate Studies for Standard Appraisal.

Note: Once a program is approved by OCGS, it is presented to the Board of Governors for approval. The Provost has final authority to determine whether a program may proceed.

RYERSON UNIVERSITY Chemical Engineering (PhD) SUMMARY

Ryerson University proposes to establish a doctoral degree program in Chemical Engineering that will be of high quality in advanced teaching and learning practices. Chemical Engineers have made tremendous contributions to the Canadian economy by being involved in the development and viable production of important chemical products such as polymers, medicine, fertilizers, and by serving in the imperative areas of engineering such as energy, biotechnology, environmental engineering, pharmaceutical technology, and food engineering.

Chemical Engineering plays a vital role in Ontario, which is the major industrial as well as the most populated center of Canada. Although it is a blessing for a strong and growing economy, this accumulation of people and industry has imposed excessive pressures to preserve our environment as well as to maintain and advance the current state of technology. Consequently, the training of highly qualified Chemical Engineering personnel, and their subsequent availability in adequate numbers to Ontarian and Canadian industries and universities has become increasingly important.

The proximity of Ryerson University to many research-focused industries and governmental laboratories in the Greater Toronto Area (GTA) is a major accessibility advantage to its Chemical Engineers who aspire to pursue advanced research through working toward their doctoral degrees, and continue to develop professionally. Among the universities in Ontario that have Chemical Engineering graduate training, Ryerson is the only one with no doctoral degree. Furthermore, the opportunity of studying for a doctoral degree in Chemical Engineering in the GTA, which accommodates almost half of Ontario's population, is available at only one of its institutions, as compared with four in Montreal.

Reports issued by both the Canadian and Ontario governments, OCUFA, and AUCC are all indicative of a well-defined need for the training of doctoral students in Chemical Engineering, and this Department has the capacity and will to provide an advanced and innovative program to complement its seasoned Master's program. This program is supportive of the aims and objectives of "Canada's Innovation Strategy", announced by the Government of Canada in February 2002. It is also congruent with Ryerson's academic plan "Learning Together", and the academic plan of the Faculty of Engineering and Applied Science.

The program curriculum is designed for full-time learners. The core faculty are involved in the two fields of (i) Water/Wastewater and Food Treatment Technologies, and (ii) Polymer and Processing Engineering at the Master's level. These fields of specialization will be extended to the doctoral level, where students will pursue more focused, advanced scholarly research work and high level of intellectual developments in these two fields. As mentioned earlier, these fields are vital to the viability of both regional and national economic growth, and to the research community. It is anticipated that the first cohort of graduate students would enter the doctoral program in September 2005. The intake for the first year will be 3–4 students; however, the planned steady-state enrolment (total) in the Doctoral program will be 12–14 students.

Objectives and Structure of the Proposed Program

The intellectual development of doctoral students is the primary commitment and objective of the proposed program. The central mechanism for this intellectual growth will be the preparation of an advanced research thesis. A doctoral student will be required to perform, report and defend an original research that makes a significant scholarly contribution to the field. The student, guided by the faculty supervisor(s), will learn how to clearly define an advanced research problem, how to specify a systematic plan for its investigation, how to analyze the problem which may include experimental techniques and or simulation/modeling methods, and finally how to expand their findings to new feasible initiatives. The development of the student's critical thinking abilities will be fostered by regular meetings with the faculty supervisor(s). The student's progress will be monitored through weekly meetings and annual oral presentations. The student will be required to make an oral presentation of her/his research progress as part of a research seminar series, and to attend special lectures by eminent scholars in the field. Students in the advanced stages of their thesis research will be required to present and publish their research findings at regional, national, and international conferences. With the guidance of the faculty supervisor(s), students will also be strongly encouraged to prepare manuscripts for submission to refereed scholarly journals. The following are the specific requirements of the proposed doctoral program:

General Admission

A master's degree preferably in one of the two main fields, or in a relevant engineering discipline with at least a B+ standing and demonstrated research capabilities.

General Courses

At least four one-term graduate courses beyond the master's degree.

Candidacy Examination

A written examination and defence of dissertation proposal.

Minimum Residency

Two years.

Doctoral Thesis:

Based on original research, and examination of thesis following Ryerson's established dissertation defence procedures.

Faculty Resources

A total of 13 core faculty members are supporting the proposed Ph.D. program in Chemical Engineering. The diverse background and expertise of the faculty in the Department of Chemical Engineering, who are all Professional Engineers, and the two participating faculty from the Department of Chemistry and Biology, and the School of Nutrition are added advantages for the proposed program. The core faculty members, individually and as a group, in each of the above two fields, possess extensive research experience exhibited by their publication records in peer-reviewed journals, books, and (inter)national conferences. In total, the faculty members have supervised 31 Master's students, 5 Ph.D. students, and 5 postdoctoral fellows. Currently, the faculty members are supervising 41 Master's students, 5 Doctoral students (at other Universities), and 4 postdoctoral fellows. The faculty members are involved as principal investigators with individual projects, and as co-investigators in large projects funded by the Government and industry, i.e., NSERC, CFI, OIT, Imperial Oil, and Dairy Farmers of Canada. The current operating research funds of the faculty members total more than \$800,000. It is hoped that the establishment of the proposed doctoral program will improve the growth of funds and increase the number of research publications.

Approval or Action by	Responsibility	MA – Int Economics & Fin.	MA – Pub. Pol. & Administration	MN Nursing.	PhD Chem Eng
	,	Ryerson Review			1
Dean - SGS	Letter of Intent (LoI) – including initial analysis of financial viability	X	X	X	X
SGS Program & Planning Comm	Reviews LOI to determine if program appears feasible.	X	X	X	X
Provost	Decides to proceed based on responses to LoI. Instructs sponsors to prepare OCGS program proposal.	X	X	X	X
Internal/External Consultant	An expert in the field from another university reviews the proposal. Sponsors re-draft if necessary.	X	X	X	X
Provost	Discusses proposal with Dean, sponsor.	X	X	X	X
P&P	Reviews draft OCGS brief in light of I/E report – recommends to Council SGS based on academic quality	X	X	X	X
Council, SGS	Reviews proposal	X	X	X	X
Academic Council	Reviews program proposal for academic quality and moves to proceed to OCGS	X	X	X	
	Ontario Co	ouncil on Graduate St	udies Review		
Appraisal Committee	7 senior faculty from across Ontario + Exec. Dir read brief and comment to Ryerson. Univ can advertise program.	X	X		
External Consultants	2 or 3 selected, visit Ryerson for a two day period. Prepare reports for submission to OCGS, which sends reports to Ryerson.	X	X		
Ryerson	Responds to report(s)		X		
Appraisal Committee	Reviews report and response and presents recommendation to OCGS (All graduate Deans in Ontario)				
OCGS Executive	Informs Ryerson of decision, provides letter required by Ministry for funding				
Director	claim. OCGS meeting.				
	T =	Further Procedures	5		T
Board of Governors	Program is presented to Board of Governors for approval of financial viability.				
Ministry	The Program is presented to the Ministry for approval				
Provost	Provost decides about implementation				

REPORT TO ACADEMIC COUNCIL, OCTOBER 5, 2004 cont'd

School of Graduate Studies

3. For information, the School of Graduate Studies submits the following three courses offered at the University of Toronto for the joint graduate program in *Spatial Analysis*, to be offered in Winter 2005, to Academic Council for information. These courses are being submitted for information purposes in order to have the courses listed on RISIS for the registration of Ryerson students in Winter 2005. No Ryerson teaching faculty or department is affected by these changes.

SA89XX (Elective Course)

Sedimentation and Fluvial Geomorphology

Programs Affected: GSPA, GSPP

Programs and Planning Approval: October 12, 2004 SGS Council Approval Date: October 21, 2004

SA89XX (Elective Course)

Advanced Hydrology and Water Quality

Programs Affected: GSPA, GSPP

Programs and Planning Approval: October 12, 2004 SGS Council Approval Date: October 21, 2004

SA89XX (Elective Course)

Health in Urban Environments

Programs Affected: GSPA, GSPP

Programs and Planning Approval: October 12, 2004 SGS Council Approval Date: October 21, 2004

Dr. Maurice Yeates Chair

School of Graduate Studies Council