STATUS OF NEW GRADUATE PROGRAMS in Graduate Review Process (for programs planned for September, 2005)						
Approval or Action by	**Responsibility**	**MA – Int Economics & Fin.**	**MA – Pub. Pol. & Administration**	**MN -- Nursing.**	**PhD Chem Eng**	**MA-ECS** planned for 2006
Ryerson Review						
Dean - SGS	Letter of Intent (LoI) – including initial analysis of financial viability	X	X	X	X	X
SGS Program & Planning Comm	Reviews LOI to determine if program appears feasible.	X	X	X	X	X
Provost	Decides to proceed based on responses to LoI. Instructs sponsors to prepare OCGS program proposal.	X	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	X
Provost	Discusses proposal with Dean, sponsor.	X	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	X
Council, SGS	Reviews proposal	X	X	X	X	X
Academic Council	Reviews program proposal for academic quality and moves to proceed to OCGS	X	X	X	X	X
Ontario Council on Graduate Studies Review						
Appraisal Committee	7 senior faculty from across Ontario + Exec. Dir read brief and comment to Ryerson. Univ can advertise program.	X	X	X	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	X	X	May 17/18
Ryerson	Responds to report(s)	X	X	X		
Appraisal Committee	Reviews report and response and presents recommendation to OCGS (All graduate Deans in Ontario)	X	X			
OCGS Executive Director	Informs Ryerson of decision, provides letter required by Ministry for funding claim. **OCGS meeting.**	X	X			
Further Procedures						
Board of Governors	Program is presented to Board of Governors for approval of financial viability.	X	X			
Ministry	The Program is presented to the Ministry for approval	X	X			
Provost	Provost decides about implementation	X	X			

STATUS OF NEW GRADUATE PROGRAMS in Graduate Review Process (for programs planned September, 2006)							
Approval or Action by	**Responsibility**	**MA – MSW** 2006 or 2007	**MSc – Biomed. Physics PhD**	**MBA /MMSc – Mgmt Tech & Innov**	**MBA – Global Business**	**MSc Molecular Science**	**PhD Aerospace Engineering**
Ryerson Review							
Dean - SGS	Letter of Intent (LoI) – including initial analysis of financial viability	X	X	X	X	X	X
SGS Program & Planning Comm	Reviews LOI to determine if program appears feasible.	X	X	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. Re-draft if necessary.		X	X	X	X	
Provost	Discusses proposal with Dean, sponsor.		X	X			
P&P	Reviews draft OCGS brief in light of I/E report – recommends to Council SGS based on academic quality		X	X			
Council, SGS	Reviews proposal		X	X			
Academic Council	Reviews program proposal for academic quality and moves to proceed to OCGS		X				
Ontario Council on Graduate Studies Review							
Appraisal Committee	7 senior faculty from across Ontario + Exec. Dir read brief and comment to Ryerson. Univ can advertise program.						
External Consultants	2 or 3 selected, visit Ryerson for a two day period. Prepare reports for submission to OCGS, which sends reports to Ryerson.						
Ryerson	Responds to report						
Appraisal Committee	Reviews report and response and presents recommendation to OCGS (All graduate Deans in Ontario).						
OCGS Executive Director	Informs Ryerson of decision, provides letter required by Ministry for funding claim. **OCGS Meeting.**						
Further Procedures							
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, MAY 9, 2005

SCHOOL OF GRADUATE STUDIES

1. The School of Graduate Studies has reviewed the proposal for an ***MBA/MMSc in Management of Technology and Innovation*** 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 *MBA/MMSc in Management of Technology and Innovation* will be implemented in Fall 2006.

   Motion

   To approve the submission of the proposal for an *MBA/MMSc in Management of Technology and Innovation* 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
MBA/MMSc in Management of Technology and Innovation

EXECUTIVE SUMMARY

Ryerson University proposes to establish a graduate program in the Management of Technology and Innovation (MOTI), offering two graduate degrees. The proposed degrees are a coursework-based, Master of Business Administration (MBA) degree, and a coursework plus thesis-based Master of Management Science (MMSc). These are specialist programs designed to meet the demonstrated societal need for professionals with a *combination* of technology and management skills.

The MBA degree offers three fields of study: Media Management, Supply Network Management and Information Systems Management. Although there are many MBA programs in Canada, there are none that offer specializations in Media Management or Supply Network Management. None of the MBAs currently offered in the GTA focus on the Management of Technology and Innovation or offer a specialization in Management Information Systems. There is no specialist research master's degree focused on MOTI in the GTA region.

The graduate program in MOTI involves 24 faculty members from three Faculties at Ryerson: the Faculty of Business, the Faculty of Communication and Design, and the Faculty of Engineering and Applied Science. The breadth of expertise and experience of faculty involved within the program provide it with a strong foundation for academic excellence.

Ryerson's GTA location provides an opportunity for the proposed program to have an immediate positive impact on the region. The proposed program will establish Ryerson as an academic and professional leader in the Management of Technology and Innovation. The program will create a venue for collaboration between industry and academia, as students and faculty members work with organizations in the region on problems

and challenges related to innovation and technology management. The program also supports the development of multidisciplinary research alliances within Ryerson.
This program aligns closely with Ryerson's academic plan. The program:

- has a particular focus on societal need, career/professional relevance
- has innovative program features;
- builds on established strengths of the university and contributes to the university's strategic goals;
- has high potential to contribute to the future enhancement of both SRC and undergraduate program strength (including increasing the number and quality of research proposals; generate new opportunities for undergraduates to be involved with SRC projects; and increase the number of research partnerships within Ryerson and with external organizations);
- will be a major factor in attracting and retaining faculty;
- will not place an undue financial burden on the University.
-

The program curriculum is designed for both full-time and part-time learners. It is anticipated that the first cohort of graduate students would begin the program in September 2006, with anticipated initial enrolments of 40 full-time students and 20 part-time students. A steady state enrolment of 80 full-time and 40 part-time students would be achieved in the 2007-2008 academic year. The program can be completed in 12 months on a full-time basis, or 24 months part-time.

The MBA curriculum is based on the accelerated format found across Canadian business schools. The format requires that students entering the program have a business background, and are able to demonstrate that they have completed coursework that is equivalent to the first year of a "traditional" MBA program. In the accelerated format, students complete 20 modules to earn the MBA degree. Entry to the MMSc requires the same background business knowledge as for the MBA degree. The program does offer alternative entry routes to both degrees for students who do not have the required background.

There is a common 10 module core curriculum for the MBA and MMSc degrees. The core modules are:

- Technology and Organization Theory
- Aligning Technology and Corporate Strategy
- Models for Innovation and Technology Diffusion
- Ethical Technology Leadership and Change Management
- Advanced Project Management
- Financial Analysis for Technology Management
- Entrepreneurship, Intrapreneurship and Innovation
- Human Factors in Technology Design
- Advanced Technology Integration
- Global Markets and Trends in Technology

Candidates for the MBA degree concentrate their study in one of the three fields, taking 6 field specific electives, and 4 general electives. MMSc candidates take a 2 module research methods course and do an 8 module thesis. An overview of the curriculum is provided in the table below.

	MBA			MMSc
	MIS Field	Media Management Field	Supply Network Management Field	
Core Modules	10	10	10	10
Research Methods	0	0	0	2
Field Specific Electives	6	6	6	0
General Electives	4	4	4	0
Thesis	0	0	0	8
Total	20	20	20	20

There are 10 core faculty members with expertise in the MIS field, 5 in the Media Management field, and 9 in the Supply Network Management field. 10 additional faculty will be involved in teaching the core modules. It is anticipated that there will be a significant increase in the number of core faculty involved with the program over the next few years.

The core faculty has a mix of senior scholars and younger scholars. In the 2003-2004 year the core faculty were awarded more than $1 million in research funding, from granting agencies like NSERC, SSHRC, and CFI, and from other peer-reviewed, government and contract sources. Many of the faculty members have international reputations in their fields, and have published in top journals that include *European Journal of Operational Research*, *IBM Systems Journal*, *IT & Society*, *International Journal of Information Technology Management*, *Journal of Information Technology*, *Journal of Technology Transfer* and *Management Information Systems Quarterly*.

Students in the program have access to a full range of academic and infrastructure support, including computing facilities, library access, and research laboratories. The program will be housed in the new Faculty of Business building.

This graduate program will be administered by the Management of Technology and Innovation Graduate Program Director, appointed by an Appointments Committee with representation from each participating academic unit, and chaired by the Associate Dean, Academic, of the Faculty of Business. The Director will also serve as the Program Director reporting to the School of Graduate Studies. The Director will be part of the Faculty of Business Management Team and also report to the Dean of Graduate Studies on related issues. He or she will receive appropriate administrative support through the Faculty of Business and the School of Graduate Studies.

2. For information, the School of Graduate Studies will submit the following course offered at York University for the joint graduate program in ***Communication and Culture***, to be offered in spring 2005, to Academic Council for information. This course is being submitted for information purposes in order to have the course listed on RISIS for the registration of Ryerson students in spring 2005. No Ryerson teaching faculty or department is affected by this change.

CC tba (Elective Course)
Armed Conflict, Peace & the Media
Programs Affected: GCAC, GCAP, GCDC
Program Approval Date: July 9, 2004
SGS Council Approval Date: April 21, 2005

CC tba (Elective Course)
Philosophy, Culture and Values
Programs Affected: GCAC, GCAP, GCDC
Program Approval Date: July 9, 2004
SGS Council Approval Date: April 21, 2005

CC tba (Elective Course)
Philosophy, Culture and Values
Programs Affected: GCAC, GCAP, GCDC
Program Approval Date: July 9, 2004
SGS Council Approval Date: April 21, 2005

CC tba (Elective Course)
City as Cinema
Programs Affected: GCAC, GCAP, GCDC
Program Approval Date: July 9, 2004
SGS Council Approval Date: April 21, 2005

The following York University course will be changing its course title:

CC8843
Culture, Counterpublics and the WTO (current title)
Cultural Industries, Trade and the WTO (new title)
Programs Affected: GCAC, GCAP, GCDC
Program Approval Date: July 9, 2004
SGS Council Approval Date: April 21, 2005

3. SGS Council submits, from the graduate program in ***Mechanical Engineering*** that: effective Fall 2005, the MEng program in *Mechanical Engineering* graduate program will require the successful completion of ten course credits consisting of either eight one-term graduate courses and a two-credit research project (option 1) or ten one-term graduate courses (option 2). This program is available on a full-time or part-time basis and is retroactive to all students currently enrolled in the *Mechanical Engineering* graduate program. The current requirement is the completion of eight elective courses and a project. This will be available to all new and currently enrolled students in the MEng program in Mechanical Engineering.

4. SGS Council submits, from the graduate program in ***Civil Engineering***, course changes that are attached.

5. SGS Council submits, from the graduate program in ***Chemical Engineering***:
   i) Course changes that are attached.
   ii) The following courses will have revised course descriptions, starting September, 2005:

   CE8000: *Thesis*
   CE8201: *Modeling and Simulation in Chemical Engineering*
   CE8402: *Applied Thermodynamics*
   CE8501: *Polymer Science*
   CE8703: *Advanced Water Treatment Technologies*

6. SGS Council submits, from the graduate program in ***Electrical and Computer Engineering***:

i) Course changes that are attached.

ii) To change the areas of specialization in the Master's programs to harmonize with the PhD specializations to include:

a. Computer Systems Engineering
b. Power Engineering
c. Signal Processing and Communications

iii) Effective Fall 2005, the MEng program in *Electrical and Computer Engineering* graduate program will require the successful completion of ten course credits consisting of either eight one-term graduate courses and a two-credit research project (option 1) or ten one-term graduate courses (option 2). This program is available on a full-time or part-time basis. The current requirement is the completion of eight elective courses and a project. This will not be retroactive to currently enrolled students and will take effect with students beginning Fall 2005.

iv) Effective Fall 2005, all MASc and PhD students in the *Electrical and Computer Engineering* graduate program will be required to complete course EE8010 *Research Seminar in Electrical and Computer Engineering* as part of graduate requirements. This is in addition to the existing course requirements.

_____

Maurice Yeates, Dean
Chair, School of Graduate Studies Council

GRADUATE COURSE CHANGE FORM - 1

LIBRARY CONSULTATION:
Name: _____

Signature: _____

Date: _____

APPROVALS AND SIGNATURES:

Program Director (following approval by Program Committee)
Name: Dr. Alagan Anpalagan

Signature: _____

Date: _____

Chair, Department
Name: Dr. Sri Krishnan

Signature: _____

Date: _____

Dean, Teaching Faculty
Name Dr. Stalin Boctor

Signature: _____

Date: _____

Dean, Graduate Studies (following approval by the SGS Programs and Planning Committee and SGS Council)

Programs and Planning Committee Approval Date:
Name Dr. Maurice Yeates

Signature: _____

Date: _____

SGS Council Approval Date:
Name Dr. Maurice Yeates

Signature: _____

Date: _____

Secretary of Academic Council
Name Dr. Diane Schulman
Signature: _____

Date: _____

ADDITIONAL COMMENTS: If the course change form does not accommodate all the necessary information, explanation, or background pertaining to the proposed change(s), please provide additional commentary here.

COURSE CHANGE FORM – 2 School of Graduate Studies

Graduate Program: Electrical and Computer Engineering
Initiating School/Department: Electrical and Computer Engineering

Approval of VP Academic: _____
Dr. Errol Aspevig

Course Number	Course Title	Mark with "X"			Required Course?	Credits	Programs Affected	Implement Date	Purpose of Change
		Amended	Deleted	Added	Y/N				
EE8109	Wireless Communications	X			N	1	GLDC/GLSC/ GLEN/GLEP	Fall 2005	Title change to *Wireless Communications I.*
EE8202	Digital Image Processing	X			N	1	GLDC/GLSC/ GLEN/GLEP	Fall 2005	Title change from *Digital Image Processing I.*
EE8502	Analog MOS Design	X			N	1	GLDC/GLSC/ GLEN/GLEP	Fall 2005	Title change to *CMOS Analog Integrated Circuits.*
EE8205	Embedded Software Systems	X			N	1	GLDC/GLSC/ GLEN/GLEP	Fall 2005	Title change to *Embedded Computer Systems.*
EE8306	Fundamentals of Robot Dynamics and Control	X			N	1	GLDC/GLSC/ GLEN/GLEP	Fall 2005	New Exclusion.
EE8111	Digital Signal Processing II	X			N	1	GLDC/GLSC/ GLEN/GLEP	Fall 2005	Content change.
EE8409	Electromagnetic Theory	X			N	1	GLDC/GLSC/ GLEN/GLEP	Fall 2005	Content change.
EE8207	High Performance Computer System Design	X			N	1	GLDC/GLSC/ GLEN/GLEP	Fall 2005	Content change. New exclusion.
EE8501	VLSI System Design	X			N	1	GLDC/GLSC/ GLEN/GLEP	Fall 2005	Content change. New exclusion.
EE8209	Intelligent Systems	X			N	1	GLDC/GLSC/ GLEN/GLEP	Fall 2005	Content change. New exclusion.
EE8405	Power System Operation and Control	X			N	1	GLDC/GLSC/ GLEN/GLEP	Fall 2005	Title change to *Power System Stability and Control* Also content change.
EE8503	CMOS with Applications for Optical and Wireless Communications	X			N	1	GLDC/GLSC/ GLEN/GLEP	Fall 2005	Title change to *VLSI Circuits and Systems for Communications.* Also content change. New pre-requisite.

COURSE CHANGE FORM – 2 School of Graduate Studies

Graduate Program: Electrical and Computer Engineering
Initiating School/Department: Electrical and Computer Engineering

Approval of VP Academic: _____
Dr. Errol Aspevig

EE8208	Computer Aided Synthesis & Design of Digital Systems	X			N	1	GLDC/GLSC/ GLEN/GLEP	Fall 2005	Title change to *Architectural Synthesis & Design of Digital Systems*. Also content change.
EE8106	Real Time Digital Signal Processing		X		N	1	GLDC/GLSC/ GLEN/GLEP	Fall 2005	Overlapping with other courses.
EE8110	Coding Techniques for Digital Communication		X		N	1	GLDC/GLSC/ GLEN/GLEP	Fall 2005	Overlapping with other courses.
EE8212	Digital Image Processing II			X	N	1	GLDC/GLSC/ GLEN/GLEP	Fall 2005	New course
EE8119	Wireless Communications II			X	N	1	GLDC/GLSC/ GLEN/GLEP	Fall 2005	New course.
EE8213	Computer Network Security			X	N	1	GLDC/GLSC/ GLEN/GLEP	Fall 2005	New course.
EE8214	Computer Systems Modeling			X	N	1	GLDC/GLSC/ GLEN/GLEP	Fall 2005	New course.
EE8410	Power Electronics			X	N	1	GLDC/GLSC/ GLEN/GLEP	Fall 2005	New course.
EE8412	Advanced AC Drive Systems			X	N	1	GLDC/GLSC/ GLEN/GLEP	Fall 2005	New course.
EE8010	Research Seminar in Electrical and Computer Engineering			X	Y*	P/F	GLDC/GLSC/ GLEN/GLEP	Fall 2005	New two-term seminar course which is pass/fail, in addition to the normal degree requirements.

* EE8010 is a required course for students enrolled in GLDC/GLSC program.

GRADUATE COURSE CHANGE FORM - 1

LIBRARY CONSULTATION:
Name: _____

Signature: _____

Date: _____

APPROVALS AND SIGNATURES:

Program Director (following approval by Program Committee)
Name: Dr. Mohamed Lachemi

Signature: _____

Date: _____

Chair, Department
Name: Dr. Said Easa

Signature: _____

Date: _____

Dean, Teaching Faculty
Name Dr. Stalin Boctor

Signature: _____

Date: _____

Dean, Graduate Studies (following approval by the SGS Programs and Planning Committee and SGS Council)

Programs and Planning Committee Approval Date:
Name Dr. Maurice Yeates

Signature: _____

Date: _____

SGS Council Approval Date:
Name Dr. Maurice Yeates

Signature: _____

Date: _____

Secretary of Academic Council
Name Dr. Diane Schulman
Signature: _____

Date: _____

ADDITIONAL COMMENTS: If the course change form does not accommodate all the necessary information, explanation, or background pertaining to the proposed change(s), please provide additional commentary here.

COURSE CHANGE FORM – School of Graduate Studies

Graduate Program: Civil Engineering
Initiating School/Department: Civil Engineering

Approval of VP Academic: _____
Dr. Errol Aspevig

Course Number	Course Title	Mark with "X"			Required Course?	Credits	Programs Affected	Implement Date	Purpose of Change
		Amended	Deleted	Added	Y/N				
CV8601	Behavior and Design of FRP Structures			X	N	1	GVSC/GVEN/ GVEP/GVDC	September 2005	Provide more course offerings to graduate students

GRADUATE COURSE CHANGE FORM - 1

LIBRARY CONSULTATION:
Name: _____

Signature: _____

Date: _____

APPROVALS AND SIGNATURES:

Program Director (following approval by Program Committee)
Name: Dr. Philip Chan

Signature: _____

Date: _____

Chair, Department
Name: Dr. Ali Lohi

Signature: _____

Date: _____

Dean, Teaching Faculty
Name Dr. Stalin Boctor

Signature: _____

Date: _____

Dean, Graduate Studies (following approval by the SGS Programs and Planning Committee and SGS Council)

Programs and Planning Committee Approval Date:
Name Dr. Maurice Yeates

Signature: _____

Date: _____

SGS Council Approval Date:
Name Dr. Maurice Yeates

Signature: _____

Date: _____

Secretary of Academic Council
Name Dr. Diane Schulman
Signature: _____

Date: _____

ADDITIONAL COMMENTS: If the course change form does not accommodate all the necessary information, explanation, or background pertaining to the proposed change(s), please provide additional commentary here.

COURSE CHANGE FORM –School of Graduate Studies

Graduate Program: Chemical Engineering
Initiating School/Department: Chemical Engineering

Approval of VP Academic: _____
Dr. Errol Aspevig

Course Number	Course Title	Mark with "X"			Required Course?	Credits	Programs Affected	Implement Date	Purpose of Change
		Amended	Deleted	Added	Y/N				
CE8601	Selected Topics in Env. Biodynamics		X		N	1	GHEP/GHEN/ GHSC	Sept. 2005	Course never been offered since program started in Sept. 2001, since faculty member was interested in teaching it.
CE8704	Selected Topics in Env. Chemistry		X		N	1	GHEP/GHEN/ GHSC	Sept. 2005	Course never been offered since program started in Sept. 2001, since faculty member was interested in teaching it.
CE8801	Introduction to Food Processing		X		N	1	GHEP/GHEN/ GHSC	Sept. 2005	Course never been offered since program started in Sept. 2001, since faculty member was interested in teaching it.
CE8203	Applied Optimal Control			X	N	1	GHEP/GHEN/ GHSC	Sept. 2005	To add a course on a current research area in Chemical Eng. Faculty member has agreed to teach course.
CE8303	Advanced Fluid Dynamics			X	N	1	GHEP/GHEN/ GHSC	Sept. 2005	To add a course on a classical area in Chemical Eng. Faculty member has agreed to teach course.
CE8803	Advanced Food Process Engineering			X	N	1	GHEP/GHEN/ GHSC	Sept. 2005	To add a course on a current research area in Chemical Eng. Faculty member has agreed to teach course.