REPORT OF THE ACADEMIC STANDARDS COMMITTEE

Report #W2012–2; March 2012

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

- the name change of the *Bachelor of Arts in Early Childhood Education* programs to the *Bachelor of Arts in Early Childhood Studies* program
- the revisions to admission requirements for *Bachelor of Engineering* programs
- the phasing out of the *Learning Edge Laptop Program* from the *Bachelor of Business Technology Management* program
- the *Certificate in News Studies* from the Chang School
- the *Project Management Bridging Certificate for Internationally Educated Professionals* from the Chang School
- the professional development *Certificate in Health Studies* from the Chang School
- curriculum modifications to the *Bachelor of Commerce in Accounting and Finance* degree programs
- the periodic program review of the *Bachelor of Science (Computer Science)* program
- the *Bachelor of Arts* program in *Professional Communication* from the Faculty of Communication and Design

A. NAME CHANGE OF THE BACHELOR OF ARTS IN EARLY CHILDHOOD EDUCATION TO BACHELOR OF ARTS IN EARLY CHILDHOOD STUDIES

At its January 24, 2012 meeting, Senate approved a motion to change the name of the School of Early Childhood Education to the School of Early Childhood Studies. This change will come into effect in Fall 2012.

As a complement to the change to the School's name, the School is proposing to change the designation of both its four-year degree and two-year degree completion programs from Bachelor of Arts in Early Childhood Education to Bachelor of Arts in Early Childhood Studies. The name changes of the School and of the programs reflect evolution in the School as a result of the periodic program review of the Bachelor of Arts in Early Childhood Education (approved by Senate, November 2010).

There are three key reasons for the proposed name change: the revised name better reflects the breadth and depth of knowledge and skills expected of students over the course of the program; the change recognizes that students enter the program with the intention of working with young children in

a wide range of careers in education, community services and health; the change distinguishes the School's program from two-year diplomas in ECE offered by the community colleges.

The first intake of students to the program with the revised degree designation is the Fall 2013 cohort. Marketing of the program under its new name will begin in the Fall 2012 recruitment cycle.

Recommendation

Having satisfied itself of the merit of this proposal, ASC recommends: *That Senate approve the proposed change to the name of the Bachelor of Arts in Early Childhood Education programs to Bachelor of Arts in Early Childhood Studies.*

B. REVISIONS TO THE ADMISSION REQUIREMENTS FOR BACHELOR OF ENGINEERING PROGRAMS

The Faculty of Engineering, Architecture and Science (FEAS) is proposing modifications to the requirements for admission to eight Bachelor of Engineering programs. The programs are Aerospace, Biomedical, Chemical, Civil, Computer, Electrical, Industrial and Mechanical.

The rationale for the proposal is to allow Ryerson to admit better qualified students to its engineering programs. In addition, the proposed change is compatible with the admission requirements to engineering programs at other Ontario universities. The proposal was discussed and unanimously approved by the FEAS Chairs' Council on January 18, 2012.

The detailed changes are presented below, but in summary admission requirements for the eight engineering programs will continue to include five prerequisite subjects, however, Calculus and Vectors (MCV4U) will be a required course instead of an optional or preferred course. This change would eliminate the consideration of Mathematics of Data Management (MDM4U), Earth and Space Science (SES4U) or Biology (SBI4U) as the fifth prerequisite. The revised admission requirements will also be applicable to students who apply for admission to engineering programs under the Undeclared Engineering plan.

The revised admission requirements would take effect for the Fall 2013 admission cycle.

Current 2011-2012 Full- and Part-time Undergraduate Calendar

Aerospace Engineering, Biomedical Engineering, Chemical Engineering Co-op, Civil Engineering, Computer Engineering, Electrical Engineering, Industrial Engineering, Mechanical Engineering and Undeclared Engineering

ADMISSION: O.S.S.D. with six Grade 12 U/M courses including Grade 12 U courses in: English, Advanced Functions (MHF4U), Physics (SPH4U), Chemistry (SCH4U) and one of Calculus and Vectors (MCV4U), or Mathematics of Data Management (MDM4U), or Biology (SBI4U), or Earth and Space Science (SES4U). Calculus and Vectors (MCV4U) is the preferred course.

NOTES:

1. ENG4U/EAE4U is the preferred English.
2. The grade(s) required in subject prerequisites (normally in the 65-70 percent range) will be determined subject to competition.
3. Calculus and Vectors (MCV4U) is strongly recommended for all Engineering programs.
4. Subject to competition, candidates may be required to present averages/grades above the minimum.

Proposed 2013-2014 Full- and Part-time Undergraduate Calendar

Note: Changes to current admission requirements are shown in ***italics bold***.

Aerospace Engineering, Biomedical Engineering, Chemical Engineering Co-op, Civil Engineering, Computer Engineering, Electrical Engineering, Industrial Engineering, Mechanical Engineering and Undeclared Engineering

ADMISSION: O.S.S.D. with six Grade 12 U/M courses including Grade 12 U courses in: English, Advanced Functions (MHF4U), ***Calculus and Vectors (MCV4U)***, Physics (SPH4U) and Chemistry (SCH4U).

NOTES:

1. ENG4U/EAE4U is the preferred English.
2. The grade(s) required in subject prerequisites (normally in the 65-70 percent range) will be determined subject to competition.
3. Subject to competition, candidates may be required to present averages/grades above the minimum

The ASC notes that data from the Office of the Dean, FEAS, indicates that about 99% of the Fall 2011 intake cohort to the Bachelor of Engineering degrees had taken Calculus and Vectors (MCV4U) in high school. The same was true of the Fall 2010 cohort. In addition, between 65 and 90% of admitted students, depending on the Engineering program considered, had Calculus and Vectors (MCV4U) as one of their top five Grade 12 subjects. Finally, the data show that the absence of Biology (SBI4U) would have negligible impact on admissions to the Biomedical Engineering program.

Recommendation

Having satisfied itself of the merit of this proposal, ASC recommends: *That Senate approve the proposed modifications to the admission requirements for Bachelor of Engineering degree programs.*

C. PHASE OUT OF THE LEARNING EDGE LAPTOP PROGRAM, BACHELOR OF BUSINESS TECHNOLOGY MANAGEMENT

The Ted Rogers School of Information Technology Management is proposing to phase out its Learning Edge Laptop program. The intention is that for the F2012 intake, there will be no laptop program. The rationales include:

1- Over the past 10 years, since the inception of the Learning Edge Program, technology has changed so rapidly that the initial objectives/ benefits of the program are no longer valid.

2- Faculty members confirmed that in many of the courses laptops are not used as part of the classroom teaching.

3- A clear majority of the software packages used in the program are open source software packages and free for download.

4- The price for a notebook laptop on the market today is much more affordable that what the ITM Learning Edge program can offer.

5- Running a leasing operation is not the core competence of an academic unit. The program may be exposed to financial and operational risks. The cost of maintenance of the overall operation is very high.

6- Recently approved curriculum changes in ITM are based on AACSB standards and impact course delivery. In the revised curriculum, core courses contain 2 lecture hours and 1 lab hour. The lab hour can be used for computer work formerly done on laptops.

In effect, activities formerly done on the mandatory laptops will now be incorporated as part of course lab time. Sufficient lab space is available in the TRSM building to meet the anticipated needs.

The program sees this development as benefitting its students in the sense that they will no longer be required to pay a fixed ancillary fee for the laptop program (approximately $900 per year). The phase out of the Learning Edge, and subsequent reduction in ancillary fees, has no impact on potential student funding levels via OSAP.

The phase out will be managed in such as way that support for current laptops will be maintained until September 2013. At that point the last cohort to start with the laptop program (F2011) will be entering third year. At this point they would have renewed their laptops through the Learning Edge program. Now they would be directed to make us of computer lab spaces in TRSM instead. So they will not be disadvantaged.

Disbursement of Residual Funds in the Learning Edge Cost Centre: Since the program has been running for 10 years, there is a surplus of funds in the Learning Edge cost centre(s). ITM is working closely with

the financial officer of TRSM and Ryerson Financial Services to develop an equitable model to disburse these funds in a way that benefits students. For example, support of student/alumni groups, support of an ITM Careers Centre etc.

Recommendation

Having satisfied itself of the merit of this proposal, ASC recommends: *That Senate approve the proposed phase out of Learning Edge Laptop Program for the Bachelor of Business Technology Management degree program.*

D. PROPOSAL FOR A CHANG SCHOOL CERTIFICATE IN NEWS STUDIES

The Proposal: The Chang School, in collaboration with the School of Journalism (Faculty of Communication and Design, FCAD), is proposing a six-course *Certificate in News Studies*.

Rationale for the Certificate: We live in a news and information-saturated society. Information and opinion are delivered via traditional news platforms such as newspapers, television and radio newscasts, and magazines, as well as by newer modes including on 24- hour cable television channels, via live web streaming on cell phones and computer tablets, on radio and TV podcasts, and at the click of a button on countless websites and blogs. People want—and need—to learn more about this enormous societal force which impacts their lives. Indeed, it is clear media literacy has never been more important than it is today. The Certificate in News Studies will focus on teaching them how the news business works (vs. the actual craft of journalism).

Target Audience: The target audience of the certificate are those whose work intersects with Journalists, media relations personnel, individuals interested in news and the media and students interested in pursuing a career in communications.

Objectives of the Certificate: The goals of the certificate are for certificate graduates to be able to analyze the news media and news stories and to gain an understanding of how journalists and other media personnel construct their reality. The proposed certificate will offer students clear and focused information and tools to help them interpret the news that they read, watch and hear.

Admissions: In order to be admitted to the Certificate in News Studies, participants may already have a degree or be mature students with relevant work experience. Students are required to have at minimum an OSSD with six Grade 12 U or M credits, including Grade 12 U or M English.

Academic Management and Governance: The Certificate in News Studies will reside in the School of Journalism in the Faculty of Communication and Design. The Chang School will be responsible for providing administrative support. Routine matters, both academic and administrative, will be the responsibility of the Academic Coordinator, whose duties and responsibilities are set out in the appendices.

Structure of the Proposed Certificate: The *Certificate* requires the completion of six courses; one Required and 5 Electives:

Required Course: CNNS101 Introduction to News

Electives (Choose 5): CNNS102 Understanding Multimedia Journalism; CJRN123 Ethics and Law in the Practice of Journalism; CJRN401 History of Journalism; CJRN412 Documentary Survey; CNNS500 Journalism and the Arts; CNNS502 Journalism and the World of Business; CNNS505 Health and Science Journalism; CNNS506 International Journalism; CNNS512 Reporting Sports

All courses will feature lectures, audio/visual presentations, group discussions, and case studies of journalistic work as their major components. All courses currently exist, so no new courses development is required.

The anticipated launch date for the Certificate is Fall 2012.

Recommendation

Having satisfied itself of the merit of this proposal, ASC recommends: *That Senate approve the proposed Certificate in News Studies.*

E. PROPOSAL FOR A PROJECT MANAGEMENT BRIDGING CERTIFICATE FROM THE CHANG SCHOOL

The Faculty of Engineering and Architectural Science, in cooperation with the G. Raymond Chang School of Continuing Education, are proposing to offer a Project Management Bridging Certificate for Internationally Educated Professionals. Funding from the Ministry of Citizenship and Immigration (MCI) has been secured for the period December, 2011 to November 2014 for the bridging program *Middle Level Managers with Technical Background*. In the next three years, one hundred and eighty internationally educated professionals are expected to participate in this proposed certificate program, consisting of two 30-person cohorts each year. The Chang School intends to offer this Certificate to the general public once the MCI grant has been fulfilled.

Certificate Goals The goal of the certificate is for certificate graduates to increase their employability by acquiring a level of knowledge and expertise that will permit them to move into project management roles. Participants will increase their knowledge of the sector terminology, tools, work place culture and communication in Canada, as well as their communication and leadership abilities. The proposed certificate will also help prepare students for the Project Management Professional Examination. Students are also eligible to continue on with the Certificate in Project Management and/or the Certificate in Program and Portfolio Management, both offered through The Chang School.

Target Audience The target audience is comprised of internationally educated professionals with technical background such as engineers, IT professionals, scientists, environmentalists and other technical professionals.

Curriculum The curriculum learning outcomes will provide internationally educated professionals with an opportunity to acquire a level of knowledge and expertise that will permit them to contribute effectively to the management and quality control required for projects.

The Project Management Bridging Certificate for Internationally Educated Professionals consists of six (6) required courses. These courses currently exist.

Required Courses:

CKPM 202 Fundamentals of Project Management

CKPM 211 Leadership in Project Management

CKPM 212 Project Cost and Procurement Management

CCMN 432 Communication in the Engineering Professions

CKPM 216 Project Management Internship

CDCE 400 Exploring Leadership Skills

In addition, students will participate in an 8-week placement.

Development Plan The bridging program will be delivered commencing in May 2012.

Societal Need The vision of the Government of Canada with the funding provided to Ryerson University is to allow highly skilled immigrants to Canada to acquire project management competencies for gainful employment. The idea is to create a world class and globally competitive workforce to make Canada more productive. A majority of internationally skilled professionals locate in Ontario, and, in particular, in the Greater Toronto Area. However, once they arrive, these internationally educated professionals face significant challenges to participate fully into the Ontario's economy. The proposed certificate will prepare internationally educated professionals to become employed in middle level management positions in the field of project management with skills and knowledge such as estimation, schedule, risk analysis, quality assurance, leadership, communication, workplace culture in Canada and problem-solving skills.

Admission Requirements To be eligible for admission to this certificate, the individual must be an accepted and registered participant of the Gateway Middle Level Managers Program housed in The Chang School of Ryerson University.

All applicants to the Program shall satisfy the following requirements:

1. be a legal resident of Ontario province at the time of application and be eligible to work in Canada;

2. have resided in Canada for no more than ten years;

3. be an internationally educated professional in a technical disciplines suitable to this program;

4. have a baccalaureate (BS) degree equivalent to an Ontario degree (i.e. an assessment of educational credentials through a professional body or an approved assessment agency in Ontario (e.g. World Education Service);

5. proven two years of previous work experience in project management; and

6. demonstrate English language proficiency, through any of the Ryerson university approved English language proficiency test scores.

When a student is accepted and registered in the Gateway program, that student will concurrently be registered as a certificate candidate.

Academic Home and Governance The Academic locus for this certificate shall be the Office of the Dean of the Faculty of Engineering and Architectural Science (FEAS). Professor Alex Ferworn will serve as the FEAS Academic Coordinator.

The FEAS Academic Coordinator will liaise with the relevant teaching department and coordinators in terms of the overall coordination of the academic oversight of the certificate; including, the Academic Coordinator for the Project Management courses and the Academic Coordinator for the communications course.

Recommendation

Having satisfied itself of the merit of this proposal, ASC recommends: *That Senate approve the proposed Bridging Certificate in Project Management from the Chang School.*

F. PROPOSAL FOR A PROFESSIONAL DEVELOPMENT CERTIFICATE IN HEALTH STUDIES FROM THE CHANG SCHOOL

The TRSM School of Information Technology Management & School of Health Services Management in collaboration with The G. Raymond Chang School of Continuing Education propose a professional development Certificate in Health Studies.

Certificate Goals The goals of this proposed certificate derive from a submission to the Ministry of Citizenship and Immigration by The Chang School Gateway for International Professionals program for a funded bridging program for international professionals seeking employment opportunities in the healthcare system in Ontario and elsewhere throughout Canada.

The proposed certificate fits well with the University's Academic Plan, which speaks directly to initiatives that offer lifelong learning through continuing education programming and are designed "to meet the access obligations of a democratic society", but especially so "in providing innovative programming that prepares internationally trained professionals for careers in Canada." (Academic Plan, Strategy 6 p.13)

Target Group/Audience The objective of the proposed project is the successful integration of internationally trained health care professionals and health care technicians into the health care sector of the Ontario economy. By providing sector-specific knowledge, learning, and opportunities for experience, along with individualized counseling towards clear career pathways, the Certificate will increase opportunities for more appropriate employment for the program participants.

Curriculum In its initial phase this bridging program consists of a course series upon completion of which graduates are awarded a **Professional Development Designation: Health Care System**. The course series is structured by two health-sector program pathways (or streams), each of which is comprised of a) language acquisition and workplace culture curriculum, together with b) a selection from eight health-sector specific courses drawn from two existing certificate programs in Health Informatics and in Health Services Management.

Development Plan What is distinctive about this particular certificate proposal is that, unlike some IEP-bridging programs offered through The Chang School that terminate with the completion of a certificate, this offering is designed in terms of its development plan to provide bridging to multiple health-sector certificates currently available in The Chang School. Hence the title, **Health Studies** rather than a specific professional or occupational field, such as **Health Service Management** or **Health Informatics** (or potentially ten other Ryerson health-sector related certificate programs housed in several Ryerson Faculties).

Societal Need The Government of Ontario envisions the strengthening Ontario's economic advantage through the creation of a well-trained workforce. This workforce is significantly enhanced by welcoming internationally trained professional who can contribute to maintaining its competitive advantage.

Admission Note: a distinction is made here between “admission” to the Gateway-MCI funded program and subsequent admission to the Health Studies Certificate. Once the Gateway program has been completed, graduates will be deemed to have the requisite qualifications to be admitted to the Health Studies Certificate. The admission process is detailed in Section 3 of the proposal.

Academic Governance The academic home of the Certificate in Health Studies will be the School of Health Services Management TRSM). The normal procedures and prescriptions mandated by Policy #76 shall apply to the academic and administrative oversight of this certificate offering.

Program Delivery Mode The Professional Development Designation: Health Care System program will be offered as an intensive program, as follows:

Phase 1: A compressed six-week format which consists of the two foundational courses: CHSM 301 The Healthcare System: Customized for internationally educated professionals (39 hours over 6 weeks); and one of WCC 101 Workplace Culture and Communication in Canada (39 hours over 6 weeks) or CHIT 100 Introduction to Health Informatics (39 hours over 6 weeks) or CHSM 305 (Management Cycle). Customized for Internationally Educated Professionals.

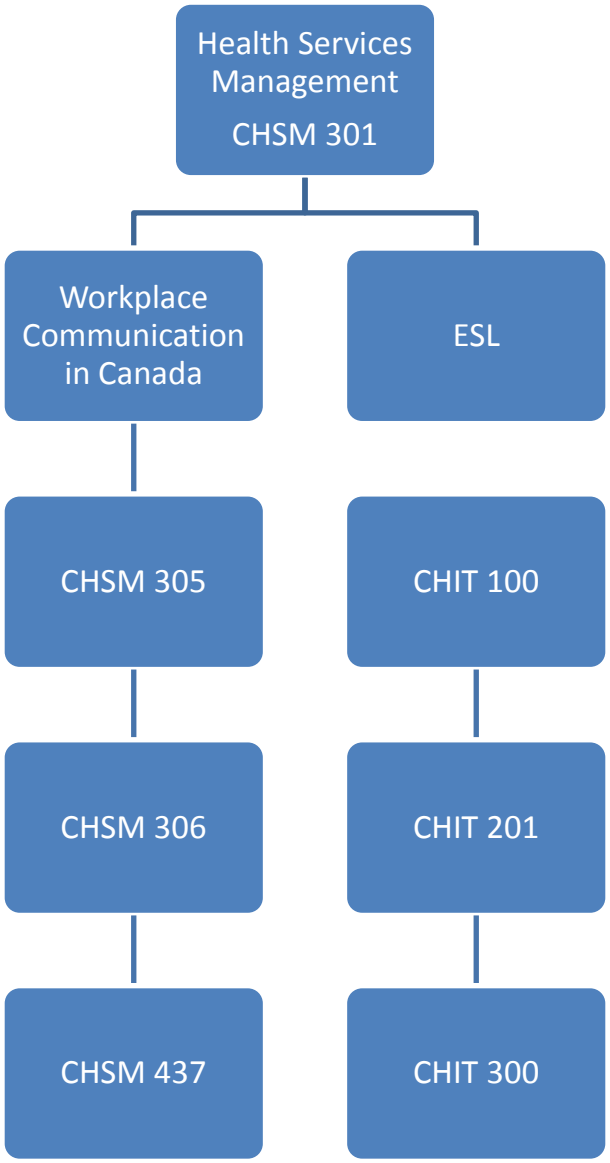
Phase 2: A compressed six-week format which consists of two courses chosen from the selected stream (either Health Informatics or Health Services).

Phase 3: A compressed placement in the health care sector (lasting 6 weeks, estimated at 10 hours per week for a total of 60 hours of work placement).

Structure of the Proposed Curriculum for the Professional Development Certificate in Health Studies:

Course Series leading to: Professional Development Designation (5 courses)

Required: CHSM 301; WCC or ESL
Electives: choose one from: CHSM 305 or CHIT 100; Choose two from CHSM 306 and CHSM 437; or CHIT 201 and CHIT 300.
Completion of all 8 courses earns Certificate in Health Studies (8 courses)



As the broader purpose of the bridging program is to launch internationally trained professionals into on-going professional career development, students may, past completion of the professional development designation, complete the four additional courses to be awarded the **Certificate in Health Studies.**

Alternatively, if students have chosen relevant courses from the health services management stream or the health informatics stream, they may transfer these course credits directly to currently existing certificates in health services management or health informatics; with the addition of the necessary number of courses (required and elective) they may complete these certificates.

Recommendation

Having satisfied itself of the merit of this proposal, ASC recommends: *That Senate approve the proposed professional development Certificate in Health Studies from the Chang School.*

G. CURRICULUM MODIFICATIONS TO THE BACHELOR OF COMMERCE PROGRAMS IN ACCOUNTING AND FINANCE

Background and Rationale The School of Accounting and Finance (SAF), housed in the Ted Rogers School of Management, was approved by Senate in January 2011. The SAF was created on the basis of a quality agenda to better serve the needs of students aspiring to professional careers in the fields of accounting and finance. The objective is to develop a School that will attract the best qualified applicants, students who will excel in the School's program and in the workplace. The curriculum of the Accounting and Finance departments within the new School must not only satisfy various accrediting bodies, it must also prepare students for the professional world of Accounting and Finance. The School will also represent an important differentiator for TRSM and Ryerson University from other business schools in the Greater Toronto Area.

The curriculum modification proposal details the changes required by the Accounting and Finance Departments for the academic year commencing in September 2013. The Accounting and Finance programs are professional programs that will prepare students to obtain professional certification in their respective major. In order to ensure the success of students in their future careers, this proposal addresses: Changes in entrance requirements; Changes in curriculum and teaching methodologies; Academic Standing Variations; Adherence to the UDLES requirements and accreditation standards of AACSB; Chang School courses; Plans to develop a strong research culture.

This proposal also provides a detailed plan for the phase-in of a revised Accounting and Finance curriculum in SAF as well as the phase-out of the Accounting and Finance majors in TRSBM. Every effort has been made to ensure that future students have an opportunity to apply to and be accepted into the SAF. Similarly the proposal addresses the support structures necessary to ensure that students, once in the program, have every opportunity to specialize in their field of choice (Accounting or Finance). In addition, it attempts to provide for students who, once in the program, discover that this is not the right place for them. Finally, the proposal adheres to the philosophy of the University when determining the needs of our students and the academic standards for the SAF with respect to admissions, transfers, and continuance.

Enhanced Admission Requirements

Current Admission Requirements and their Implications - Students enter the Accounting or Finance majors in their second year as Ted Rogers School of Business Management (TRSBM) students. To be accepted into TRSBM, students are required to have just one University ("U") level math course from High School, and there is no specification as to which U-level math course that should be.

Accounting and Finance (A & F) are both quantitative programs that require students to have good math and problem solving abilities. Due to the one-math requirement for entrance, a large number of A & F students struggle with the quantitative aspects of the Accounting and Finance programs. This not only has a negative impact on student performance, it requires course delivery in such a way as to make graduates less competitive for professional designation than those from other accounting and finance programs.

New Admission Requirements and their Implications - Beginning in Fall 2013, the SAF proposes that applicants continue to be assessed on six Grade 12 U/M courses, but that these courses include at least one Grade 12 U course in English and two Grade 12 U courses in mathematics, one of which must be Calculus and Vectors (MCV4U). Applicants must have a minimum grade of 75% in each of these three courses.

By attracting students with higher incoming skills SAF will not only enhance the educational experience for its students, but will also ensure that all graduating students achieve a higher minimum standard of training before they graduate. This enhanced training experience will help SAF in pursuit of accreditation from the professional accounting bodies. Given that companies do not want to hire accounting graduates unless they plan to pursue a professional accounting designation, accreditation will enhance both the reputation of the TRSM and the employability of our graduates.

Diagnostic Testing - In recognition of the fact that a portion of the current student body has difficulty with professional communication, and with quantitative skills, SAF also proposes diagnostic testing for all incoming students. Effective for Fall 2013 academic year, applicants who are admitted to the SAF will be required to complete a Math and English standardized test, to be written in September of their year of acceptance. The purpose of these tests is to identify areas of weakness in basic reading, writing and arithmetic skills, and to direct these students into one or more remedial courses as appropriate. The SAF will monitor the effectiveness of the diagnostic testing and remediation courses. If these prove ineffective, the SAF would consider switching to an admission model consisting of grades plus testing which forms part of the basis for admission.

Admissions from other Sources - Students will be able to apply to the SAF from the Chang School, from other Schools in the TRSM, and from other faculties at Ryerson. There are also provisions for students to apply to the SAF from Community Colleges (advanced standing) and from other accredited universities. In all cases, students will have to meet stringent entrance criteria detailed in the full proposal. Students who receive advanced standing may receive credit for up to a maximum of 14 courses towards their SAF degree, but will be required to take most, if not all, of the SAF Accounting and Finance courses.

Transfer or Challenge credit requests will be assessed and approved based on an appropriate set of criteria to be determined. Letters of Permission for students to take substitute courses at other institutions or elsewhere at Ryerson will also be assessed and approved based on an appropriate set of criteria to be determined.

Declaring a Specialization and Transfers within Ryerson Detailed transition plans are provided in the proposal. Students taking the full program (41 courses) will be required to declare a specialization (Accounting or Finance) at the end of their second year. Students who have received advanced standing up to and including second year will have to declare their specialization upon entry into the program.

Students will be allowed to switch their specialization at any time after their initial declaration, but will be required to complete any courses towards the major that they have not taken previously. This means the student will be required to take additional courses, and may therefore require additional time to complete his or her program.

Part-Time Program There is no plan to offer a part time program.

Minors Accounting students will be able to take a Finance Minor in the SAF, and vice-versa. Because SAF students share a common curriculum in the first two years and do not have any professionally related courses until the fifth term, the exact courses required for the SAF Accounting or Finance minor have not yet been determined. Accounting and Finance minors for non-SAF students will continue to be offered using current ACC and FIN courses. This means there will be separate ACC and FIN minors for SAF students and for other students.

Curriculum The curriculum proposed below will meet the needs of accrediting bodies and the enhanced delivery rigour possible as a result of the enhanced admission requirements. It will position Ryerson graduates to be fully competitive in the labour market.

The proposal notes that as the new curriculum is phased in, the courses that support the current ACC and FIN majors will also have to be delivered at least until 2017. In reality, this time period is likely to be longer due to students who are out of phase. In addition, the SAF will continue to offer ACC and FIN courses to TRSBM students who wish to pursue minors in accounting or finance. The proposal also outlines a strong and on-going curricular relationship with the Chang School.

The main points related to the curriculum are as follows:

- Phase in of the SAF curriculum will begin in September 2013. By September 2016 all four years of the programs will be offered.
- Courses offered by the Accounting or Finance department to SAF students will have an SAF prefix to differentiate them from the ACC and FIN courses offered to TRSBM
- The SAF curriculum will only be offered to students that have been accepted into SAF. There will be no SAF courses offered through the Chang School and there will be no part-time program.

- SAF will still have two programs – one for Accounting and one for Finance.
- There will be a two year common core with courses in quantitative studies, communication, and critical thinking in addition to courses in business, accounting and finance.

The third and fourth year courses will allow and require students to concentrate on those courses particular to their profession.

These changes can be considered to be of a minor nature. For example, of the approximately 50 SAF designated courses that will be provided through the program, only three are actually new courses. The rest are versions of courses that are currently delivered through the TRSBM. The differences will be in pedagogy and the academic level at which courses can be taught given a different set of students.

Curriculum details are provided in the full proposal and the curriculum in table format is presented at the end of this report. The following table presents the curriculum categorized to illustrate program balance:

Course Type	**Number of Courses**		**Percentage**	**University Approved Range**
	Accounting	**Finance**	**(of 41 courses)**	
Professional (Core)	29	29	70%	60% - 75%
Prof. Related (Open)	6	6	15%	10% - 30%
Liberal	6	6	15%	15%

Note that in the proposal the "Open Electives" are selected from "Three courses from Business Management Table 1. Course selection must not include any SAF courses ending in 0, 1, 2, 3, or 4. Finance specialists cannot take courses with ACC or FIN prefixes for credit." However, reflecting impending changes to Ryerson's curriculum, the SAF has confirmed that these courses will be truly open electives for SAF students. That is, students will be free to select these 6 courses from the full collection of courses defined as Open Electives at Ryerson.

Degree Designation The SAF will offer one degree at this time; a Bachelor of Commerce (BComm). Students' degree awards will be BComm (Accounting) or BComm (Finance) depending upon their area of specialization within the SAF.

Degree Level Expectations SAF has mapped the Undergraduate Degree Level Expectations and concluded that the current curriculum has too many courses at the *introduction* and *mastery* levels, but too few at the *reinforce* level. SAF will review its courses in the near future in order to address this matter.

Academic Standing Variation This part of the proposal tries to address the issue of students who start the program but seem unable to follow it through without significant academic struggle. In a nutshell, the ASV is a screen to help the program identify students who will not succeed at the earliest opportunity and to direct them in new directions. The approach taken here is to raise the expectations of students with regards to the work required to be successful. As the proposal puts it "By establishing required minimum standards in the early stage of the Accounting, Finance and Quantitative courses, we will send a clear and strong signal about the commitment needed to succeed in the professional courses."

Under the terms of the ASV, students will be required to achieve a minimum grade of C+ in their first two Accounting courses, their first two Finance courses, and their first Quantitative Methods course. Students who do not achieve the minimum grade in a course

- Will experience a lowering in Academic Standing,
- Will not be enrolled in any further courses for which that course was a pre-requisite, and,
- Will be required to repeat the course and obtain a grade of C+ or better.

Students will have up to 3 opportunities (i.e., two repeats) to achieve these minimum requirements in the five courses indicated.

It should be noted that similar academic standing variations are currently applied to 15 programs across campus.

Fresh Start/Early Intervention/Transition Programming - SAF view this ASV proposal as a variant of Fresh Start. The School will establish an early warning system (i.e., early intervention strategies) for students who run into problems, and will offer the Accounting, Finance and Quantitative courses over the summer months (i.e., transition program) so that students who were not successful can catch up with their classmates.

SAF and the Research Agenda The proposal discusses the research agenda and needs of the SAF. While not core to the undergraduate curriculum delivery, the proposal makes that point that by providing the tools needed to build a strong research culture, the SAF can enhance its reputation as a teaching institution that promotes student engagement and success. In short, a strong research culture supports student engagement in the classroom.

Administration The SAF is part of the Ted Rogers School of Management. The new SAF will include two departments, one each for Accounting and Finance, each with its own Chair and its own administrative assistant (AA), as is currently the case. Students will apply directly to the School of Accounting and Finance. Over a four year period it is anticipated that the School will have a full-time student body of approximately 1000 students.

Accreditation Within the context of accreditation, the future potential to attain a separate AACSB accreditation for the School of Accounting and Finance may only be achieved through the steps taken in this curriculum proposal toward improved quality and standards.

SAF Bachelor of Commerce Curriculum

1st SEMESTER

Common to both Specializations

REQUIRED:

BUS 100 Strategies for Success†

GMS 200 Introduction to Global Management

SAF 100 Introductory Financial Accounting

QMS 641 Quantitative Methods for Accounting and Finance

MHR 405 Organization Behaviour and Interpersonal Skills

LIBERAL STUDIES: One course from Table A*

†This course is graded on a pass/fail basis

*Table A can be found in the Ryerson University Full-Time Undergraduate Calendar 2011-12 under the heading of Liberal Studies Policy/Tables

2nd SEMESTER

Common to both Specializations

REQUIRED:

QMS 703 Statistics for Finance and Accounting

SAF 200 Management Accounting

SAF 210 Principles of Finance

SSH 105 Critical Thinking

CMN 279 Introduction to Contemporary Business Communication

3rd SEMESTER

Common to both Specializations

REQUIRED:

MKT 100 Principles of Marketing

ECN 104 Introductory Microeconomics

SAF 310 Managerial Finance

SAF 300 Intermediate Accounting I

LIBERAL STUDIES: One course from Table A

4th SEMESTER

Common to both Specializations

REQUIRED:

LAW 122 Business Law

ECN 204 Introductory Macroeconomics

SAF 400 Intermediate Accounting II

SAF 410 Derivative Securities

LIBERAL STUDIES: One course from Table A

Finance Specialization

5th & 6th SEMESTERS

REQUIRED:

SAF 500 Intermediate Accounting III

SAF 501 Investment Analysis

SAF 502 Personal Financial Planning

SAF 604 Ethics in Finance

PROFESSIONAL: Two courses from the following:

SAF 611 Fixed Income Securities

SAF 621 Advanced Portfolio Management

SAF 512 Risk Management and Insurance

SAF 612 Retirement and Estate Planning

SAF 513 Entrepreneurial Finance

SAF 613 Short-Term Financial Management

SAF 514 Financial Modelling I

SAF 614 Financial Modelling II

SAF 524 International Finance

LIBERAL STUDIES: One course from Table B.**

PROFESSIONALLY-RELATED: Three courses from Business Management Table 1. Course selection must not include any SAF courses ending in 0, 1, 2, 3, or 4. Finance specialists cannot take courses with ACC or FIN prefixes for credit.

** Table B can be found in the Undergraduate Full-Time Calendar 2011-2012 under the heading of Liberal Studies Policy/Tables

7th & 8th SEMESTERS

REQUIRED:

SAF 704 Financial Intermediation

CMN 314 Professional Presentations

BUS 800 Strategic Management

PROFESSIONAL: Two courses from the following:

SAF 711 Advanced Investment Management

SAF 811 Financial Risk Management

SAF 812 Advanced Personal Financial Planning

SAF 713 Advanced Corporate Finance

SAF 813 Corporate Financial Analysis

SAF 724 Real Estate Finance

LIBERAL STUDIES: Two courses from Table B.

PROFESSIONALLY-RELATED: Three courses from Business Management Table 1. Course selection must not include any SAF courses ending in 0, 1, 2, 3, or 4. Finance specialists cannot take courses with ACC or FIN prefixes for credit.

Accounting Specialization

5th & 6th SEMESTERS

REQUIRED:

SAF 500 Intermediate Accounting III

SAF 619 Intermediate Cost and Management Accounting

PROFESSIONAL: Three courses from the following:

SAF 518 Auditing

SAF 517 Taxation for Managers and Financial Planners

SAF 615 Public Sector Accounting

SAF 625 Accounting for Small Business

SAF 618 Internal Auditing

LIBERAL STUDIES: Two courses from Table B.**

PROFESSIONALLY-RELATED: Three courses from Business Management Table 1. Course selection must not include any SAF courses ending in 5, 6, 7, 8, or 9. Accounting specialists cannot take courses with ACC or FIN prefixes for credit.

** Table B can be found in the Undergraduate Full-Time Calendar 2011-2012 under the heading of Liberal Studies Policy/Tables

7th & 8th SEMESTERS

REQUIRED:

BUS 800 Strategic Management

PROFESSIONAL: Five courses from the following:

SAF 716 Advanced Financial Accounting

SAF 706 Accounting Theory

SAF 717 Canadian Business Taxation I

SAF 819 Advanced Management Accounting

SAF 818 Advanced Auditing

SAF 817 Canadian Business Taxation II

LIBERAL STUDIES: One course from Table B.

PROFESSIONALLY-RELATED: Three courses from Business Management Table 1. Course selection must not include any SAF courses ending in 5, 6, 7, 8, or 9. Accounting specialists cannot take courses with ACC or FIN prefixes for credit.

ASC Evaluation of the Proposal and Recommendations The ASC recognizes the validity of the argument that insufficiently prepared students are fated to struggle in these very demanding programs. The enhanced admission requirements and diagnostic testing are designed to help with this issue. The ASC also views the proposed early intervention strategies and transition program as positive manifestations of a genuine will to help SAF students succeed.

The academic standing variation (ASV) is a tool to help students re-direct to more appropriate fields of studies at as early a stage as possible. The **ASC recommends that the SAF work closely with the Vice Provost Academic, the Registrar's Office and the calendar editor to develop the most appropriate language to express the ASV in the University calendar**. This condition must be met prior to the calendar copy deadline for the 2013 – 2014 calendar.

The proposal provides fairly detailed models for student transfer in and out of the revised SAF curriculum. During its deliberations, the ASC was assured by the Associate Dean of the TRSM that every reasonable effort would be made to assist and advise students making transfer decisions. The **ASC recommends that the effectiveness of the transfer pathways be monitored and a report provided to Senate on this topic by June 2016. The report should come from the Office of the Dean, TRSM**. The **ASC recommends that a formal advising system be put in place in TRSM to facilitate transfers**.

The proposal notes that the curriculum has sufficient courses at an introductory and mastery levels, but fewer at the reinforce level. The ASC strongly supports the SAF's plan to address this issue in the near future. The **ASC recommends that SAF start this process immediately and consult with Ryerson's Curriculum Development Team**.

Finally, the ASC reminds SAF that the current configuration of Professionally Related Electives will change when the new curriculum framework comes into force. In particular, ASC reminds SAF of its stated commitment that the 6 courses in this category will become open choices for SAF students.

Recommendation

Having satisfied itself of the merit of this proposal, ASC recommends: *That Senate approve the proposed curriculum modifications to the Bachelor of Commerce programs in Accounting and Finance.*

H. PERIODIC PROGRAM REVIEW BACHELOR OF SCIENCE (COMPUTER SCIENCE)

1. PREAMBLE The Department of Computer Science aims to promote and advance all phases of computer and information science education. The key objectives of the department mission are to further improve the quality of the academic program in Computer Science, to train both academic and industrial leaders who strive for excellence in Computer Science at the undergraduate, graduate and professional levels, and to guarantee that faculty members realize their maximum academic potential in contributing to teaching, research, and service. The mission of the Department of Computer Science can therefore be expressed as: Theory (providing the highest quality undergraduate and graduate education within the rapidly evolving fields of computer science; Discovery (promoting basic and applied research in computer science); Application (providing computer science expertise to the society); Partnership (using principles of computing to other disciplines and supporting multi-disciplinary efforts).

The aims of this program accord with those of the university as a whole: "to serve societal need by offering professional and quasi-professional university education."

2. PROGRAM DESCRIPTION The Department Computer Science offers a 40-course degree program with the designation *Bachelor of Science (Computer Science)*. This program is offered in full-time and part-time formats. The Department also offers an optional *Co-op* program whereby a student may work for sixteen to twenty months (four or five terms), typically for a software company outside of the university. A student who has applied and is accepted in this option completes the program typically in five years and graduates with the designation *Bachelor of Science (Computer Science – Co-op option)*. All versions of the program are designed to produce graduates who can work effectively as software practitioners in a wide variety of professional areas in the computing industry. The courses in all versions provide students with both theory and practice within the framework of Ryerson's tripartite curriculum. Theory forms the foundation for an understanding of the complexity of problems and algorithms, while practice prepares students for the development of applications. Students learn programming languages, and they are trained to be multilingual in the programming areas that are currently in demand. They are also given a practical treatment of both systems programming and applications programming. This combination will satisfy future career requirements in areas where a technical knowledge of all phases of software in a given application is a major advantage. An optional thesis in fourth year allows academically stronger students the opportunity to work on projects representative of assignments encountered in industry. Students in the Computer Science program become experienced with: networked environments, web-based applications, client-server applications, database design, and software engineering.

Computer Science at Ryerson was launched in 1970 within the Department of Mathematics and Physics as a three-year diploma program called Computer Applications Technology (CPTR). Within a decade, the CPTR program had become an integral part of the new Department of Mathematics, Physics and Computer Science (MPCS). In 1980 a new program was introduced, The Applied Computer Science Program (ACPS), administered by the School of Computer Science within MPCS. ACPS was a four-year program whose successful completion resulted in a Bachelor of Technology (Applied Computer Science)

degree. This program underwent various curriculum reforms in the late 1980s and early 1990s. As a result of Ryerson achieving university status in 1993, the B. Tech. (ACPS) underwent further modifications during the early 1990s to align its curriculum more closely with that of other computer science programs in the province. By 1995, the B. Tech program was being phased out and replaced by the Bachelor of Science (Applied Computer Science) program. This in turn was modified further until the current program, Bachelor of Science (Computer Science), was brought on stream in 2004. In 2005, the stand-alone Department of Computer Science was created from the former Department of Math, Physics and Computer Science. The BSc (Computer Science) program was accredited by the Computer Science Accreditation Council in 2007, an accreditation which remains in force until 2012.

The current faculty complement within the Department stands at 19 tenure-stream/tenured faculty (RFA). Between 2005/2006 and 2009/2010, year 1 intakes in the full-time program have fluctuated between 105 and 154, with the average being 133. Over the same period the intake in the part-time program has declined steadily from 34 in 2005 to just 4 in 2009. The total program enrolment (all years, full-time and part-time) has averaged 448 over the period 2006/2007 to 2009/2010.

3. THE CURRICULUM The program curriculum conforms to the Ryerson tripartite curriculum structure, providing students with a balance of professional (i.e., discipline specific), professionally related (supporting the core discipline) and liberal studies (breadth requirement) courses as summarized in the following table:

	Number of courses					
	Professional		Prof-Related		Liberal Studies	Total
	Required	Elective	Required	Elective		
Year 1	3	0	5	0	2	10
Year 2	6	0	4	0	0	10
Year 3	7	0	0	1	2	10
Year 4	0	5 to 7	0	1 to 5	2	10
	16	5 to 7	9	2 to 5	6	40
	21 to 23		11 to 14			

Professional Courses: all department taught courses.

Professionally-Related Courses: all non-department taught courses.

Ryerson's Computer Science program requires completion of 40 one term courses (eight terms of five courses per term), as is typical of the comparator programs. Each course has three lecture hours per week, which is typical of comparator programs. Courses are offered through in-class lectures that are usually supplemented by laboratories. All but four of the compulsory courses (CPS 311, CPS 506, CPS 706, CPS 721) involve laboratory periods. The number of students in each lab varies from 15 to 40 and they are usually supervised by a graduate assistant.

Professionalism and Ethics: Computer science professionalism and ethics are introduced to our students in their introductory courses (CPS 109 and CPS 209), and elaborated in CPS 633, a required course, which covers the topics using court cases as illustrations. Upper year electives in software engineering also touch upon these topics. Furthermore, all Computer Science students must complete six Liberal Studies courses, one purpose of which is to develop the capacity to understand and appraise the social and cultural context in which graduates will work as professionals and live as educated citizens.

Co-op Option: The program offers a co-op option that provides graduates with 20 months of work experience integrated into their academic program. To be admitted into the co-op program, students must have a CLEAR academic standing and a minimum cumulative GPA of 3.0 at the end of the second semester. Students are assessed through work term reports and employer evaluations in such respects as interpersonal skills, attitude, creativity and dependability.

In the 2006 graduating class, 20% of the students surveyed replied that they had personally used the co-op program. Of those individuals, 93.8% reported they were either satisfied or very satisfied with the program.[1]

Capstone Course: An optional thesis course (full year, CPS40 A/B) is available to fourth year students who want to work on a research project under the supervision of a faculty advisor. Students creatively apply the material they have learned in prior courses to a significant problem in any area of computer science.

The main objective of the thesis course is to introduce students to the breadth of tasks involved in independent research, including: literature survey (library work); problem formulation; experimentation, simulation and programming; presentation and scientific writing. The mandatory project proposal is a key component in both approving the thesis and establishing a plan for the work.

Admission Requirements: *For the Full-Time Program:* O.S.S.D. with six Grade 12 U/M courses, including Grade 12 U courses in: English, Advanced Functions (MHF4U), one of Physics (SPH4U), or Chemistry (SCH4U), or Biology (SBI4U), and either Calculus and Vectors (MCV4U) or Mathematics of Data Management (MDM4U). Calculus and Vectors (MCV4U) is the preferred mathematics course. ENG4U/EAE4U is the preferred English. Physics is the recommended Grade 12 U Science. The grade(s) required in the subject prerequisites (normally in the 65-70 percent range) will be determined subject to

[1] Canadian University Survey Consortium. *Graduating Student Survey 2006: Frequency distributions for full-time Ryerson programs*. (University Planning Office, October 2008).

competition. Subject to competition, candidates may be required to present averages/grades above the minimum.

For the Part-Time Program: This program is administered by the School of Computer Science and The G. Raymond Chang School of Continuing Education. All applicants to the program must have the following qualifications: A and C, OR B and C. Where: A. O.S.S.D. with six Grade 12 U/M courses, including Grade 12 U courses in: English, Advanced Functions (MHF4U), one of Physics (SPH4U), or Chemistry (SCH4U), or Biology (SBI4U), and either Calculus and Vectors (MCV4U) or Mathematics of Data Management (MDM4U). Calculus and Vectors (MCV4U) is the preferred mathematics course; OR B. Ability to meet the Ryerson Mature Student Guidelines; AND C. Meet one of the following: a university degree (obtained within the last 10 years) in mathematics, science or engineering with a minimum GPA of 2.0; or a three year college diploma (obtained within the last 10 years) in computer science with a GPA of 3.0 (only specific Ontario college programs will be considered. Undergraduate Admissions and Recruitment can provide details); or eight or more Ryerson continuing education credits in Computer Science courses (completed within the last 10 years) with equivalents in the full-time Bachelor of Science, Computer Science program, and completed with a minimum grade of 'C' in each course.

In addition: ENG4U/EAE4U is the preferred English; Physics is the recommended Grade 12 U Science; The grade(s) required in the subject prerequisites (normally in the 65-70 percent range) will be determined subject to competition; Students applying for advanced standing will be assessed on an individual basis to determine transfer credits that they will be given; Some students may wish to transfer from the part-time to the full-time Computer Science degree program. Only students who have completed all of the courses (or equivalent) in the first two years of the full-time program will be eligible for this program change; Subject to competition, candidates may be required to present averages/grades above the minimum.

Program Learning Objectives (UDLEs): While section 1e (Goals and Learning Objectives of the Program) of the Self-Study does make mention of some skills graduates are expected to achieve, these are limited and presented in a cursory fashion (students “may gain experience with research through a thesis course, or working as a research assistant, or continuing their studies with graduate school.”). This brief section does not adequately address the analysis of the program curriculum for consistency with the OCAV degree level expectations; a requirement which has been mandated by Ryerson Senate Policy 126 since 2008.

4. THE PROGRAM REVIEW The self-study review provides comprehensive information about the program and the department, including student data, student and graduate surveys and a comparator review. However, it does not provide a statement of the consistency of the program’s goals and mission with those of the Faculty of Engineering, Architecture and Science nor with the academic plan of the University. As noted above, the self-study does not address how the curriculum relates to the OCAV UDLEs.

4.1 Assessment of Strengths and Weaknesses: Self-Study The assessment of program strengths and weaknesses, based on the Self-Study Report are presented here.

Strengths:

Curriculum- The Computer Science program's curriculum covers all requisite core areas in Computer Science and math, while providing students with breadth in engineering, science and business, liberal studies and communication. The curriculum is regularly modified to cover emerging areas, such as data mining, information retrieval and extreme programming.

High Societal Relevance- Computer Science applications are ubiquitous in the modern world. In industries from car manufacturing to banking, computer scientists are needed to build and maintain essential software components. Similarly, in science, innovative software is continually required to decipher the genome, explore space, search for extraterrestrial life, study linguistics, build robots, and improve communications, to name a few areas of active research. Employment demand in computer science is expected to increase by ten to twenty percent in the coming decade.

Preparation of Graduates- Feedback from employer surveys indicates that computer science graduates are ready to be productive from day one. They particularly valued graduates with co-op experience. Nearly 88% of the surveyed employers intended to hire more Ryerson computer science graduates.

Student Satisfaction- The PPR data (e.g., NSSE) indicate a high level of student satisfaction with many areas of the program. Respondents rated their "entire educational experience" as either good or excellent, and that they would attend Ryerson again if they were to start over. Upper year students who completed a separate survey noted that while the program was academically challenging (91% of respondents), it is also good preparation for a career (86%), well-organized (76%) and of high quality (90%). Students were also noted to be animated and articulate. Students value the practical foucs of many of the courses.

Graduate Satisfaction- Surveys of graduates found them to be generally positive towards the value of their degrees. They were particularly praiseworthy about issues such as how their experiences at Ryerson contributed to skills (e.g., computer literacy, entrepreneurship, math etc.). Graduates noted a high level of satisfaction with their employment. Nearly half (47%) of graduates surveyed indicated that their jobs were significantly related to what they studied at Ryerson. By comparison, the same value for FEAS is about 49% and about 45% for Ryerson as an institution.

Department Culture- The Department is supportive and is well respected within the Faculty and by senior administration. The atmosphere is collegial.

Excellent Facilities- The undergraduate labs are equipped with up-to-date desktop computers and software. One lab is designed to facilitate the use of student-owned laptop computers on a walk-in basis. Labs are available 24-7. Students working on projects for faculty also have the use of research labs, such as the Ubiquitous and Pervasive Computing laboratory, or the robotics laboratory.

Experiential Learning- The Co-op program typically has 100% success in placing students with internships at local companies, including IBM, CIBC, and Celestica. Students gain valuable on-the-job training and experience, while earning a good salary. Besides Co-op, some students become research

assistants and work on the frontiers of computer science under the supervision of faculty. Within the curriculum, students can explore research by taking the Thesis course.

Human Resources-

Tenure/Tenure-Stream Faculty: The RFA faculty complement has increased over time. The faculty view the Department and University as a positive working environment where young faculty are supported in various ways. Students consider faculty to be caring and responsible and most are responsive to student needs. Teaching loads are viewed as reasonable.

Technical Staff: There is a dedicated technical support team. They enjoy what they do and are well respected by faculty members.

Weaknesses: The Self-Study and PRT reports flag a number of issues as summarized below.

First Year Retention - The Computer Science program experienced a three-year (2005-2007) dip in first year retention. For example, the first year retention figures (same program) for the 2002 cohort to the 2008 cohort are (77%, 73%, 74%, 48%, 59%, 58%, 77%). This problem seems to have been temporary. Some of the contributing factors may have been:

- "Bursting of the technology bubble" in 2001, which led to a decline in applications, and a consequent decline in grades of the average student accepted to the program.
- Removal of Grade 13 (OAC) in 2003, which led to decreased skills in mathematics (particularly calculus) for incoming students. This no doubt contributed to higher failure rates in the four first-year math courses and the physics course. (Starting in 2009/2010, the program has replaced the admission requirement of physics with a science option where the student chooses one of physics, chemistry or biology).
- Possible misdirection of high school students seeking education in computer and information technology. Some of the students that leave or fail our program after first year go to ITM, which they might have chosen in the first place had they been well informed of the differences between the two programs.

Lack of Specializations - One of the strengths of the program is that it is essentially an Honours program with specialization in Computer Science. Some CPS students might be better suited to a less rigorous program, but there are no options available in the program (i.e., no "regular" program). Such a regular program could have less compulsory math courses and more elective computer science courses, or even just more electives in any area.

Lack of Minors - The only minor that a computer science student can obtain in practice is in Mathematics. The program has taken a step to improve this situation by increasing the number of electives in the Engineering/Science/Business Group of the Table of Professionally Related electives. This has opened up the door to many new minors for CPS students, but to obtain a minor in a subject other than Mathematics, a student must take more than 40 courses.

Department Culture - The Department is part of a predominantly Engineering Faculty. Potentially this has a negative influence on the Department's profile/visibility.

Tenure/Tenure-Stream Faculty/Support Staff - Formal mentoring for new faculty is not in place. A small number of faculty are considered good teachers. The number of faculty may not be sufficient to balance the teaching load needs for the undergraduate and graduate programs. The number of support staff must be adequate for both the undergraduate and graduate programs.

Course Offerings - Students wanted more flexibility with electives and minors. Senior courses are not always offered. The Department does not offer enough summer session courses to satisfy all modes of co-op.

4.2 Report of the Peer Review Team (PRT) Senate policy 126 governing Periodic Program Reviews of undergraduate programs requires that a team of peers[2] visit the University and report on their assessment of the program.

Overall, the PRT judged the program to be of high quality and well-rounded, if somewhat conventional. Students are engaged, proud of the program and successful at obtaining employment and admission to graduate school upon graduation. The available facilities are "quite nice" and the Digital Media Zone offers an excellent environment for innovative project work. The program is well aligned with Ryerson's academic plan, although more effort could be spent in achieving societal relevance, recognition of teaching excellence and building reputation. While the overall picture is positive, the PRT raised a number of issues of concern. These are summarized here, along with recommendations or suggestions provided by the PRT.

Specific Concerns with Curriculum - Overall the curriculum ins clearly and carefully designed. The learning goals and objectives of the course are generally well delineated and clear. The CSAC-accredited curriculum covers the core areas of the discipline and its main areas of application in a thorough fashion. Courses are, by-in-large, taught at an appropriate level and build expertise year-over-year. The PRT identified the liberal studies and science electives as a positive feature providing students with additional breadth. Required communication and management courses were also identified as positive features. However, the PRT did identify some weaknesses with the curriculum.

Mathematics in Years 1 through 3: The PRT felt that the amount of mathematic content and the order in which it is presented is problematic. For example, in Year 1 students are required to take two discrete mathematics courses (MTH110 and 210). In most computer science programs a course like MTH210 would be offered in second year and that it might well be challenging for first-year students. **Suggestion from PRT- Consider moving MTH210 to Year 2.** Requiring two calculus courses in Year 1 and postponing linear algebra to Year 2 seems "odd" as the linear algebra knowledge is useful for the Year 2 discrete math course, a course which students find challenging. The need for a second calculus course is not

[2] The members of the PRT were Dr. Peter R. King (Professor Emeritus, University of Manitoba) and Dr. Sylvia Osborn (Associate Professor, University of Western Ontario). The site visit took place on April 5, 2011.

evident. **The PRT recommends the department consider replacing the second calculus course (MTH310) by the required linear algebra course (MTH108) in second semester of Y1; make MTH310 an optional course of use to students wishing to take an upper-year elective requiring additional calculus knowledge; make use of the resulting opening in Y2 in a different way (possibly moving the MTH210 course from Y1 and Y2).** MTH816 (Cryptography) was found to rarely be offered. **The PRT was quite concerned about this and recommends that steps be taken to ensure MTH816 be available to all students wishing to take it.**

Computer Science Courses: The PRT suggested that CPS305 be renamed as Data Structures and Algorithms. In Y3, the team felt there was an excessive emphasis on programming languages and parsing (CPS615 and CPS506). While relevant, this material need not be required of all students. The PRT also noted that this material is no longer required for CSAC accreditation. **The suggestion is that the need for this as *required* content be reconsidered.** The same comment is true of the advanced algorithms course, CPS616.

Year 4 Electives- There is a long table of upper year electives but many are not offered in a given year. The PRT was also concerned that the list of offerings in a given year was released shortly before the start of semester 7, providing little time for students to make informed choices.

Overall Program-

Goals: The program meets its stated goals in general. Its graduates are certainly "industry-ready". The PRT was, however, puzzled that the goal of producing graduates acceptable to graduate computer science programs, while articulated, was not more at centre stage as a key program goal.

Program Structure: Students have virtually no choice of computer science courses during their first three program years. In year 4, their ability to choose is virtually unlimited. This unbalance is atypical in Canadian undergraduate computer science programs. **The PRT recommends that the department consider restructuring its curriculum to allow greater choice earlier in the student's program.** Making the programming language/parsing and advanced algorithm courses optional (Year 3) would give flexibility and allow students two years in which they could take computer science elective courses.

Program Streams: Given the large number of elective CPS courses, the program may wish to identify streams within the overall program. These might include multimedia, artificial intelligence and others.

Reputation- The PRT encourages the department to continue to work to improve the image of its undergraduate program while recognizing the need to have that image align with Ryerson's traditions and culture.

Resources-

Faculty/Staff/Graduate TAs: While the faculty-base is sufficient to offer a strong core program, there is little capacity to offer new, cutting edge courses. There is also insufficient capacity to offer the full-range of Y4 CPS elective courses. The launch of the PhD will place additional pressures on the current faculty demands. Administrative support was deemed to be adequate but the PRT was concerned how the

current technical staff would cope with the additional demands brought by the PhD program launch. The graduate TA system seems to be working well and both faculty and students seemed satisfied with the level of support provided.

Physical resources: While technology resources were generally adequate, the PRT pointed out that many schools replace equipment on a 3 to 4 year cycle, rather than a 4 to 5 year cycle as is Ryerson's practice.

Students -

Student Performance: The PRT noted that the average entering grades of applicants to the program were below the average of the Faculty and that this might contribute to the observed drop off rate (loss of students). According to the data provided in the review, the rate of students with clear standing after Y1 was only about 50%. **The PRT stated that "this is a problem which should be addressed".** It offered a suggestion in the form of the reorganization of when and which math courses should be taught (see above).

Student Experience: The student experience is highly positive and the PRT attributes this to hard work by the department to meets its students needs. The cohort nature of Y1 builds a strong sense of student community which students seem to value. Students are positive about the program and have a great affinity to the institution and to the department. They felt their professors were providing quality instruction in an enthusiastic fashion on up-to-date and relevant material. Students did not comment on class size as an issue of concern. Graduates from the program become employed or admitted to graduate students with rates comparable to other programs in the province.

A few concerns were raised by students. These include: Y4 electives not being available every year; lack of availability of the Cryptography course MTH816; some technical difficulties with downloading data from departmental machines; confusion about the role and implications of the faculty course surveys; an ad hoc approach to evaluation of TAs.

5. DEVELOPMENTAL PLAN AND RESPONSE TO PRT RECOMMENDATIONS

The School's developmental plan is structured around the articulation of a number of objectives. The objectives and the initiatives which flow from them are summarized here.

Objective 1: Enhancing Staffing - by recruiting high quality faculty, including senior appointments, to replace retiring personnel. These hires will support both the newly approved PhD program and prepare for potential undergraduate enrolment growth. The Department will pursue high-quality hiring opportunities in core, strategic (AI, Robotics, networks, and security), and growth areas and identify areas in need of additional senior leadership (e.g., research chairs). The Department is developing a detailed proposal for hiring of academic staff in consultation with the Dean.

Objective 2: Enhancing and strengthening the Department's research activities and knowledge creation - endeavours through establishment of new research intensive graduate program. The Department's proposal for a PhD in Computer Science has been approved. This will be its second graduate-level program, adding to the current MSc in Computer Science.

- Preparation for academic standards assessment re: the letter of intent for PhD program proposal (Completed)
- Internal review before OCGS appraisal (Completed)
- Preparation for OCGS appraisal (in progress)
- Commencement of the new PhD program in Sep. 2010

Objective 3: Enhancing the quality of the undergraduate program in Computer Science - by offering relevant curriculum, accredited by CIPS, that covers the fundamental principles and state-of the-art tools technologies. To achieve and maintain professional peer-reviewed accreditation status, the program's curriculum and course content must continue to be regularly reviewed and upgraded - using feedback and suggestions from faculty, students, academic advisory board, and alumni. To reflect the state-of-the-art knowledge in Computer Science field, the program must continue to be regularly developed with respect to available resources, societal need and emerging technologies. The curriculum will be reviewed every year and CIPS accreditation will be maintained at all times. A CIPS assessment committee is established for each cycle of accreditation. Another related objective is improving the retention while maintaining quality. This can be achieved by developing retention strategies adapted towards the challenges experienced by first-year students, to identify the troubled first-year students early in the program, to offer proper assistance to undergraduate students, and to monitor the quality of the first year courses in general, to enhance communication channels among students, faculty, and academic advisors.

- Continuation of the transition program and the early intervention approach (on-going)
- Using carefully selected instructors for the first year courses (on-going)
- Creation of Programming Clinic (Completed)
- Upgrading the undergraduate labs on regular basis with required state-of-art equipment and software (on-going)
- Preparation for the next round of the CIPS accreditation process (2012) (under study)
- Achieving and maintaining the appropriate level/number of faculty, technical and administration in order to maintain the high standard and the quality of the program as mandated by the policies of the professional accreditation body (CIPS) (under study)
- Implementation of undergraduate streams and specializations (under study)
- Exploring and implementation of undergraduate minors and majors (under study)
- Strengthening the Informatics options in the Science program (under study)
- Enhancing the Department profile by increasing collaboration with other universities and the Industry (under study)

- Implementation of a pilot program to offer undergraduate courses on-line (to be implemented in Winter 2010)

Objective 4: Improvement and expansion of research infrastructure – which will support both improved research publications, external funding and graduate student research participation, to renovate the existing computing equipment in laboratories every four years, to acquire special purpose research quality capital equipment and development of strength in research focus areas

- Preparation of infrastructure proposals in cyber security (in progress)
- Preparation of infrastructure proposals in Augmented Reality and Robotics (in progress)
- Preparation of infrastructure proposals in Cognitive Networks (in progress)
- Preparation of infrastructure proposals in Visualization (in progress)
- Request for proper space (in progress)

Objective 5: Enhancing the research capabilities - by creation of single and multi disciplinary research teams, providing seed funding and release time for exploratory research in emerging areas, offering incentive resources such as graduate student support/scholarships for emerging and multidisciplinary fields, supporting and encouraging faculty in pursuing funding opportunities, improving research seed funding, and increasing the number of research manuscripts published in high impact leading computer science journals. The Department goal is to bring the amount of external funding to that of the provincial norm.

- Application to multidisciplinary granting agencies (on-going)
- Encouraging partnership with the industry (under study)
- Encouraging collaboration with other universities (under study)
- Creation of special seeding opportunity for faculty members working in emerging areas (under study)
- Creation of conference scholarships for graduate students (under study)

Objective 6: Improving retention – In addition to the endeavours outlined in Objective 3, we will also examine the possibility of offering multiple degrees in Computer Science. Many of the comparator universities examined in this document offer multiple degrees in Computer Science, and as mentioned earlier, we compared our program with the most similar one at the other universities, which sometimes was designated as an Honours program with a specialization in computer science. In other words, our program is a very demanding program, requiring a strong foundation in mathematics and a rather strict dedication and focus on computer science. This model does not fit all of the students that come to us. Some are not strong in mathematics, and some would like to combine computer science with study in another area, such as economics or bioinformatics. It may be that we could improve both retention and

enrolment by offering in addition to the current degree, one or more other computer science degrees which are geared towards the latter students.

Objective 7 - Improvement of the learning experience, students engagement and satisfaction through maintaining the quality and adapting strategies towards the challenges experienced by undergraduate students, e.g., to identify the troubled $1^{st}/2^{nd}$ year students early in the program, to offer proper assistance to undergraduate students, to monitor the quality of the $1^{st}/2^{nd}$ year courses in general, to enhance communication channels among students, faculty, and academic advisors, and to involve undergraduate students with the curriculum and extracurricular professional activities as related to Computer Science.

- Provide personal and academic advising to undergraduate Computer Science students via the Program Director (on-going)

- Enhance experiential learning opportunities for undergraduate students through more involvement with research and teaching activities conducted by the faculty members (under study)

- Ensuring that all office and laboratory support staff are committed to high levels of courteous, compassionate and responsible academic support services to the respective program students. It is also important that adequate staff members are available to provide these academic support services (on-going)

- Continuation of a transition program (on-going)

- Continuation of early intervention strategies (on-going)

- Offering summer courses to reduce the workload in Fall/Winter academic year (under study)

- Use of the best instructors for 1^{st} and 2^{nd} year courses (on-going)

In conclusion, the Computer Science Department is in a phase of rapid and exciting change, as we have introduced a Masters program and we are on schedule towards offering a Doctoral program. The current structure (CTRS) of the undergraduate Computer Science program was initiated in Fall 2004, so the first graduating class was in June 2008 for the regular students and June 2009 for the Co-op students. Over the five years of offering CTRS, there have been three years with poor retention and two years with good retention. The program was accredited by CIPS in 2007. We have listed a number of objectives to improve retention, teaching, student experience and SRC, while at the same time we wish to stabilize the basic structure of the undergraduate program.

Response to Program Review Team Report

1. Required Mathematics: The main concern/comment as reported in the program review document relates the program structure specifically the amount of required mathematics in the 1st and 2nd year.

Response from Computer Science:

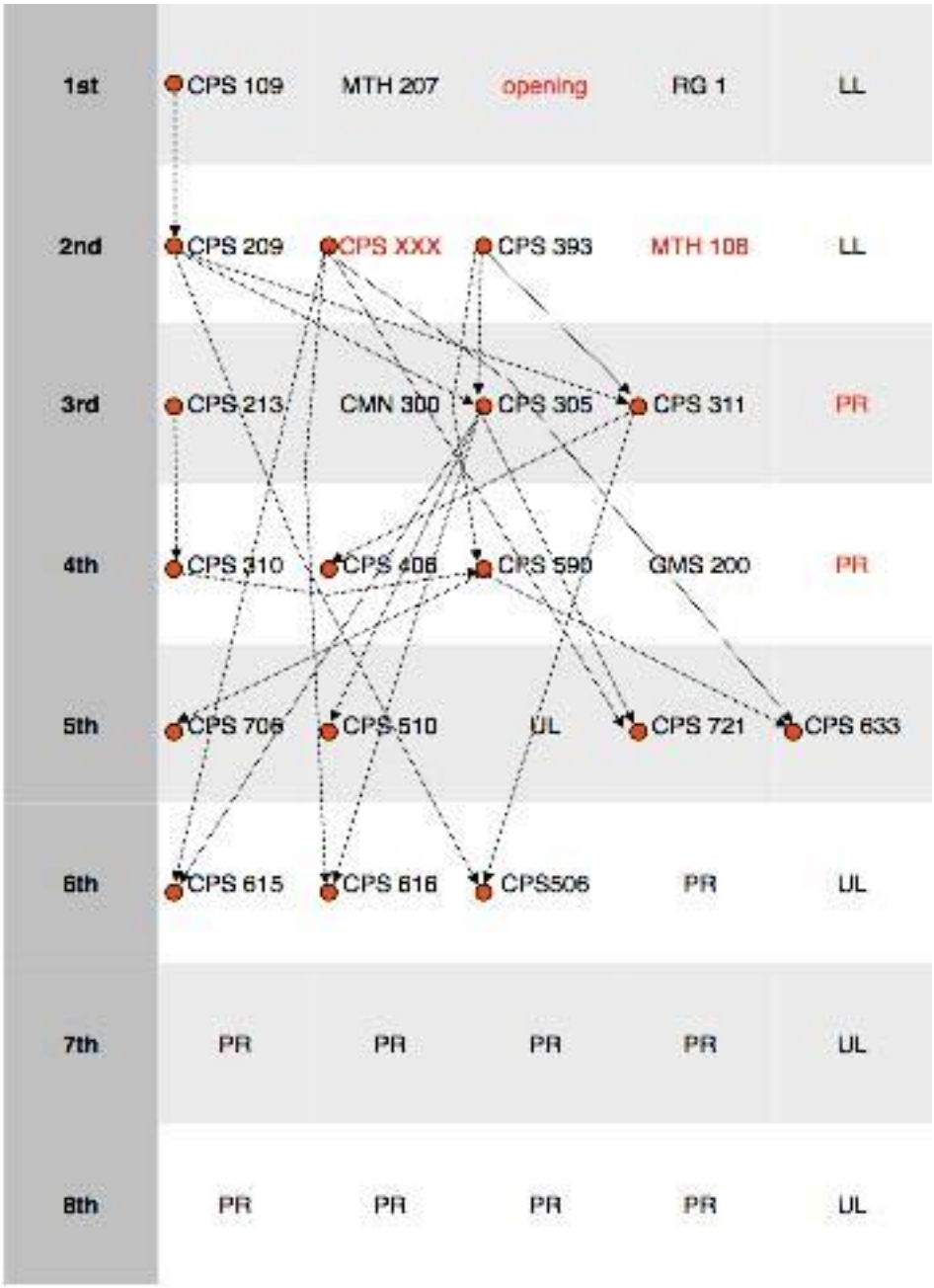
- creating a new semester 2 computer science course (CPS XXX - Discrete Structures) as a replacement for two discrete mathematics courses MTH 110 and MTH 210
- making MTH 310 and MTH 304 optional (MTH 304 has proven to be very challenging to students, covering a selection of topics that goes above and beyond the minimal discrete probability coverage suggested by the ACM-CG08. Since the new proposed course, CPS XXX, will cover core discrete probability topics, MTH 304 will become optional, and possibly prerequisite for higher level optional courses.)
- moving MTH 108 from semester 3 to semester 2 to replace MTH 310
- creating "openings" in the course grid to be filled in with either (possibly new) compulsory or elective courses, one in semester 3 (where MTH108 was positioned) and one in semester 4 (opening created when MTH304 became optional). Results: first year becomes less challenging; optional courses available earlier in program

2. *Optional vs Required Courses:* The PRT suggested the following courses should become optional courses: CPS506, CPS615, and CPS616.

Response from Comp. Sci:

- CPS 616 covers many mandatory topics and needs to be a core course
- considering making CPS506 and CPS615 optional courses

Figure 2: New course dependencies structure



3. Program Identity: The program would have a more distinctive identity if some effort were made towards making it more innovative and distinctive. The program could put some effort into achieving more societal relevance, having more recognition of teaching excellence, and could continue to work on improving its reputation.

Response: The program agrees with the PRT recommendations on this topic and is actively exploring at least two approaches to address this issue: it is actively working on developing new streams and joint

programs with other departments and faculties. For example, a Letter of Intent for a joint program between Computer Science and Radio and Television Arts on a unique program in gaming is under development. Other options under considerations are streams in computer security, networking, and a possible joint program on software engineering with ITM as well as new minors (e.g., computational financial mathematics). The Dean's response (section 6, below, also addresses this issue).

4. Cryptography Course: The team was informed that the Mathematics course MTH816 Cryptography, which many students wished to take as fulfilling their mathematics requirement in this year of study, was generally not available to them.

Response: The program has submitted a proposal for a new course in Applied Cryptography as a response to this concern. This is part of an effort to create a stream in computer and network security.

5. Streams at the Undergraduate Level: The team also suggests that, given the rich list of optional courses available to students, the department consider identifying specific streams or options within the overall program. Given the current strengths in the department, one could well imagine streams in multimedia systems, in software, in artificial intelligence and so forth. The identification of such streams or specialties is a common feature of many undergraduate computer science programs.

Response: Note response item 4, above.

6. Faculty Numbers and Upper Year Offerings: Faculty numbers combined with the teaching loads are certainly sufficient to offer a strong core of courses, although not all of the final year optional courses are offered every year. There is little capacity to offer new, cutting edge, courses.

Response: The program recognizes a shortage of faculty as an impediment to creating exciting new offerings. This issue is addressed more completely in the Dean's response (below).

7. Access to Graduate School: The team feels that the emphasis of the program is very largely on producing individuals who are well qualified for work in industry, less so for individuals who wish to proceed into graduate school.

Response: Both the MSc and PhD programs in Computer Science have been successful with over 60 students combined. The program is looking at various options to promote these programs to potential applicants. As of September 2011, the department has a dedicated support staff member, who has the responsibility of helping to promote the graduate programs. The program is also looking at involving undergraduate students in ongoing research initiatives, investigating the possibility of offering advanced cross-listed courses with SGS, as well as the possibility of a combined Bachelor-Master's program.

8. Student Performance: The average marks of students admitted from Ontario secondary schools is below both the Faculty and the University averages. The same holds for indicator 1c, the percentage of students entering with an average of 80% or higher, which for Computer Science, is approximately 20% (vs about 45% for FEAS and 62% for Ryerson). In spite of these facts, retention data have improved as noted above. In addition, the percentage of students with a clear academic standing after one year,

which hovered around 50% from 2002/03 to 2006/07, increased to about 63% by 2008/09 and 2009/10. These rates, while improving, still lag the averages for both FEAS and for Ryerson. The program believes that its efforts around early intervention and the development of a transition program have contributed to these improvements. It is committed to continue these initiatives. In addition, it proposes the creation of a first-year office to serve first year program students.

6. DEAN'S RESPONSE

The Dean's response to the self-study and PRT report/response touches on four broad categories: student retention; societal relevance and distinctiveness of the program; resources; degree level expectations/curriculum mapping.

Student Retention: The Dean supports the early intervention efforts of the program. In addition, the Dean endorses the idea that first-year computer science students would benefit from inclusion under the umbrella of the First Year and Common Science Office "to aid with orientation of new students and administration of early intervention programs". As noted in the Dean's response, there would be no requirement for the Computer Science program to align its first-year curriculum with the common science first-year platform.

The Faculty has also introduced strategies to improve student quality in all Science programs, including Computer Science, by creating the Office of Science Outreach and Enrichment (OSOE). This year the OSOE has embarked on an ambitious program to invite local high school science classes to Ryerson to introduce them to science at Ryerson. The aim of the program is to promote Ryerson as a university with a variety of strong Science programs. With partial financial support from the Dean's, the Department of Computer Science has purchased a fleet of robots, which will be used for these outreach activities. The Dean also see this strategy as a way to strengthen the reputation of the program in Computer Science.

The Dean also notes that the program has adopted the PRT recommendation to modify the math content in its curriculum. This is also anticipated to help with student retention.

Societal Relevance and Distinctiveness of the Program: The Dean supports the suggestion that the program find ways to incorporate element so faculty research into undergraduate curriculum as a way of giving the program a distinctive flavour. The Dean is also supportive of the department's initiatives around interdisciplinary programming, the gaming degree in partnership with Radio and Television Arts is noted in particular.

Resources:

Faculty Complement- The response recognizes several constraints around the faculty complement and how this impacts on program delivery and performance. The response notes that there is one faculty replacement position open which is expected to be filled within the year. In the longer term, growth in student numbers, via increased demand for the current program and/or through launch of new programming, may be a route to additional hires.

Technical Staff- While technical support within the department is currently adequate, the launch of the PhD in Fall 2011 adds additional demand which will increase as that program grows. It is expected that the increased revenue from joint programming (e.g., with Radio and Television Arts) will provide additional funding for technical staff. The department should also benefit from efficiencies due to overlap in the needs of the two undergraduate programs (current and proposed) and the graduate program.

Equipment Renewal- The Computer Science program curriculum is heavily dependent on access to up-to-the-minute computer and peripheral technology as well as software. The PRT indicated the current renewal frequency (4 to 5 years) is too low and recommended a frequency of 3 to 4 years. The Dean agrees with this suggestion and recommends a renewal cycle with 1/3 of the equipment being replaced on an annual basis. The response provides a cost estimate for this approach and recommends the process begin immediately in 2012. The costs would be shared between the Faculty and the department.

Degree Level Expectations/Curriculum Mapping: The Dean points out that having the Computer Science program do an analysis of its curriculum in light of UDLEs (i.e., curriculum mapping) over the next year is timely as it will coincide with program reviews in an number of the other undergraduate science programs.

7. ASC EVALUATION The ASC assessment of the periodic program review of the Bachelor of Computer Science and its recommendations are as follows:

Curriculum Mapping: The self-study does not contain an analysis of the curriculum in light of the degree level expectations expressed in Ryerson's IQAP. Given the concerns expressed by the PRT about curriculum inflexibility and limited student choice, **the ASC recommends that a full curriculum mapping of the program be completed and presented in a follow-up report**. It is also important that the program review its curriculum in light of the new curriculum framework. **The ASC recommends that the curriculum mapping process be used to seek additional flexibility in the curriculum with the goal of making it consistent with the new framework**.

Student Academic Performance: The developmental plan provides a number of suggestions on ways to improve student academic performance. The ASC is supportive of these efforts, especially the early intervention and transition program efforts as there is evidence to suggest these have been effective. ASC is also very supportive of the idea of specialized support for first year students. However, **the ASC recommends that first-year student support be provided through the currently existing First Year and Common Science Office, as proposed by the Faculty Dean, rather than a program-specific First Year Office**.

The program stated that it is "studying the feasibility of a plan to set the [admission] requirement for successful applicants to a minimum of 80% as of 2012". The ASC suggests that a move towards a higher entry level average for admission may be misguided. As noted previously, the self-study data support the view that current interventions have been effective in enhancing student academic performance. It

is not clear that raising the admission bar will be a more effective approach than excellent support for admitted students. ASC notes that such a change cannot be implemented for Fall 2012 as the calendar copy deadlines for the 2012/2013 calendar have already passed.

Declining Interest in the Part-Time Program: The self-study clearly shows a strong decline in enrolment in the part-time program. **The ASC recommends that the department take steps to establish whether there is a realistic demand for the part-time program and, if there is, to discuss strategies (e.g., partnership with the Chang School) to make the program attractive to students**.

Societal Relevance and Distinctiveness of the Program: ASC supports the suggestion from the PRT that the program seek ways to incorporate faculty research themes into undergraduate curriculum. The curriculum mapping may be helpful in this context. In addition, **the ASC recommends that the department draw on the expertise of the Science Teaching Chair for advice on strategies to integrate research themes into undergraduate courses in an effective way**.

Promoting the BSc Degree as a Route to Graduate Studies: The program's response to the PRT on this point presents strategies to encourage graduates of the BSc to attend Ryerson graduate programs. This is fine, but some thought should be given to promoting the BSc as a route to graduate studies in computer science at any university.

Follow-up Report In keeping with usual procedure, a follow-up report which addresses the recommendations stated in the ASC Evaluation Section is to be submitted to the Dean of the Faculty of Science and the Provost and Vice President Academic by the end of June, 2013.

Recommendation

Having satisfied itself of the merit of this proposal, ASC recommends:

That Senate approve the Periodic Program Review of the Bachelor of Computer Science degree program.

I. PROPOSAL FOR A BACHELOR OF ARTS PROGRAM IN PROFESSIONAL COMMUNICATION

1. Overview: The School of Professional Communication, Faculty of Communication and Design, is proposing a 40-course Bachelor of Arts program in Professional Communication. A Ryerson Professional Communication BA will assist students in being responsible participants in the digital and global age. They will learn the theory and practice to communicate creatively and thoughtfully in complex professional and social environments and to build the networks required to communicate effectively.

The program entails a progressive education in Professional Communication that embraces both breadth and depth, with core courses building foundational communication knowledge, encompassing theory and practice in written, oral, visual, and digital media.

A Ryerson Professional Communication BA will support:

- contemporary societal and workplace communication demands, including the growth of the knowledge economy
- the uses of electronic communication for professional and personal purposes
- compelling evidence of employer need for professional communication practitioners
- the developing need for communicators in specific fields, such as health and government

The program launch is targeted for Fall 2013. The target student intake is 60 students. The proposal makes a request for 3 full-time equivalent faculty hires

2. Program Goals: The key goal of the Professional Communication BA is to graduate students who are savvy improvisers and reflective communication practitioners. These terms embrace the basic tenets of the ProCom degree grounded in research, analysis, and practice. As part of the development of degree level expectations for the program, these overarching goals have been articulated as ten program-level goals.

1. Apply concepts from communication studies, including rhetoric, linguistics, and semiotics, to textual, visual, and oral communication issues in professional contexts.

2. Develop a range of communication strategies that can apply to different business and professional contexts.

3. Articulate a range of communication approaches for different media and audiences.

4. Plan, design, and implement complex communication projects.

5. Demonstrate critical self-assessment strategies that focus on improving communication competencies.

6. Evaluate theoretical perspectives from communication studies.

7. Apply research methods such as discourse analysis, case study, and survey research to investigate questions in communication studies.

8. Analyze social communication practices through the theoretical and applied knowledge base of professional communication.

9. Design innovative solutions to communication problems in organizational settings.

10. Demonstrate ethical awareness of communication issues and dilemmas in their professions.

3. Admission Requirements: These are provided in calendar copy format.

PROFESSIONAL COMMUNICATIONS

Degree Awarded: Bachelor of Professional Communication (BProCom)

Administered by the Faculty of Communication and Design

ADMISSION INFORMATION

DEGREE: Four years of study following Grade 12 U/M graduation.

ADMISSION: O.S.S.D. with six Grade 12 U/M courses, including Grade 12 English.

NOTES:

1. ENG4U/EAE4U is the preferred English.

2. A minimum grade of 70% in the English prerequisite is required.

3. Subject to competition, candidates will be required to present overall averages and grades above the minimum.

4. Student demand: More than 1400 students have completed the Business Communication minor offered by the School since its inception in 1993. For its inaugural Masters in Professional Communication year 67 applications were received, followed by 125 applications for Fall 2011.

5. Societal need: Using the Workopolis career site as the source, more than 50 relevant jobs were posted by a variety of organizational sectors and industries over a given period of time. Typical positions were titled "communications coordinator," "communications specialist," "communications officer," "communications assistant," "communications manager" (sometimes "marketing and communications officer," "communications and intranet manager," "public relations specialist"). Almost all postings explicitly listed a communication (or communications) degree among applicant qualifications.

6. Curriculum: Students enrolling in the ProCom BA will follow a 25 course major (with the options of minors in other areas). Students will enroll in core courses that build foundational communication knowledge, encompassing theory and practice in written, oral, visual, and digital media. Students will move from foundational courses in Year 1 that introduce theory and practice to more specialized courses in Years 2 and 3 where they will focus on specific organizational or industrial areas and genres. Year 4 continues the focused approach and provides core capstone and theory courses that challenge students to synthesize trends in the discipline.

25-course ProCom Major: It should be noted that the proposed curriculum is consistent with the new curriculum framework approved by Senate in June, 2011. The curriculum structure is summarized here:

Year 1	
Fall	**Winter**
Core: CMN2XX Text, Image, and Sound: Persuasion in the City	Core: CMN 279 Introduction to Professional Communication
Core elective	Core elective
Core elective (external)	Core elective (external)
Open elective	Open elective
Open elective	Liberal elective

Year 2	
Fall	**Winter**
Core: CMN 314 Professional Presentations	Core: CMN2XX Messages, Modalities and Media
Core: CMN2XX Digital Discourse and Design	Core: CMN2XX Communication Revolutions and Technologies
Core: CMN 414 Interpersonal Communication In Management	Core elective (external)
Core Elective	Open elective
Liberal elective	Liberal elective

Year 3	
Fall	**Winter**
Core: CMN3XX Introduction to Professional Practice	Core: CMN3XX Strategic Storytelling: the Power of Narrative across Industries and Disciplines
Core: CMN 315 Issues in Communication and the Workplace	Core: CMN3XX New Media in the Workplace

Core elective	Core elective
Open elective	Open elective
Liberal elective	Liberal elective

Year 4	
Fall	**Winter**
Core: CMN4XX Research Methods in Professional Communication (part 1)	Core: CMN4XX Research Methods in Professional Communication (part 2)
Core: CMN4XXTheorizing Communication: Conversations and Speculations	Core elective
Core elective	Core elective
Open elective	Open elective
Open elective	Liberal elective

Note- The term "core elective" is used to refer to student choice within the program core content (i.e., what would have been known as "professional elective" in the old terminology). Some of these are CMN courses, others are courses offered by other schools/departments (core elective external). "Open Elective" is a placeholder name for the category which was previously referred to as "professionally related elective". Under the new framework this category would be the part of the curriculum where students are free to choose courses for their own purposes.

The ProCom major includes the flexibility to satisfy student interest through a cohort of core electives. Students may pursue a specialist communication degree through supervised, self-designed, focused course progression and liberal studies/professionally related electives. Students may decide to specialize in the following streams: organizational/corporate/nonprofit charitable sector stream; new media/technical stream; science/health communication stream; a governance/public policy/international communication stream. As an example, the following chart describes the content relevant to the organizational/corporate/nonprofit charitable sector stream:

Organizational/corporate/nonprofit charitable stream

CMN288 Promotional Communications in New Media Contexts

CMN305 Strategic Public Relations in Professional Communication Contexts

CMN306 Risk and Crisis Communication

CMN316 Questioning Numbers

CMN413 Corporate Communications

CMN447 Communication and Law

CMN2XX Environmental Communication

CMN2XX Texts in Social Contexts

CMN4XX Oral Advocacy

With the option of communication and liberal studies/open electives, ProCom students can create a customized specialization with faculty guidance. This would include the scope to pursue minors.

Experiential Learning: The program will incorporate specific experiential learning activities into a new third year course *Introduction to Professional Practice*. This course will include a specific assignment that will require students to complete a group project related to a for-profit or non-profit organization. Building from this experience, Year Four will offer students a 2 semester capstone experience where they will be expected to design and conduct a research project related to a profit or non-for profit organization.

7. Peer Review Assessment (PRT): The Peer Review Team[3] states that the proposal is both timely and strategically situated to address a distinct and growing global need created by the rise of new and social communication media. They regard the BA as an opportunity for the department to establish itself as a pre-eminent Professional Communication department in Canada.

Comments of the PRT:

Course titles and descriptions seem more reflective of individual faculty strengths than an overarching program design. The PRT suggests that a basic progressive structure through theoretical perspectives and applications should be made more apparent in the curriculum design and course offerings.

[3] The Peer Review Team was composed of Professors Dennis Denisoff (Ryerson University); Cheryl Geisler (Simon Fraser University); and Roger Graves, University of Alberta.

ProCom response: To review courses with the goal of enhancing the balance between theory and practice in light of the PRT recommendations, ProCom will hold a curriculum retreat in Fall 2011 or Winter 2012 when new hires with expertise in needed areas such as governance, sound, and media and with strong theoretical orientations to communication theory.

The PRT notes that the current curriculum structure does not reflect the proposal's stated *Goal 1*: "Apply concepts from communication studies, including rhetoric, linguistics, and semiotics, to textual, visual, and oral communication issues in professional contexts".

ProCom responded to this concern by explicitly describing the theoretical components delivered year-by-year in the program and how they relate to this goal. This is presented in a section in the full proposal called Integration of theory and progression of course of study throughout the program.

The PRT would like to see *Goal 9* "Design innovative solutions to communication problems in organizational settings" explicitly addressed through experiential (and ideally service) learning projects based in the community. They also suggest that ProCom take some time to discuss diverse opportunities for incorporating experiential learning into its BA proposal . One possibility would be the development of a Professional Communication Consulting Clinic where students can offer advice and/or writing/new media assistance to whomever in the community needs it. The clinic could have special outreach initiatives to nonprofit and incubator projects. The clinic could also perhaps assist Ryerson students developing projects at such sites as Ryerson's Digital Media Zone or Social Innovation Zone.

The ProCom responses to issues around experiential learning are noted in section 6, above.

The proposed stream in Governance/Public Policy/International Communication - the PRT suggests reviewing other institution's programs (Université de Sherbrooke and Université Laval) with an eye to distinguishing and enhancing its own offering in this area.

The ProCom proposal was revised to reflect the differentiation between the proposed BA and these program elements. Note that neither of the competitor programs are full, stand-alone programs.

The PRT recommends a review of what proportion of courses will be basic lecture, basic workshop, online instruction, hands-on technology, as well as some description of the expertise and labour that technologically invested courses will demand; this information can then be compared to the strengths and abilities of existing faculty to ensure that the new hires most effectively address any possible resource shortcomings regarding technology-intensive courses.

In its response, ProCom noted that this assessment is ongoing in Curriculum Committee and DAC deliberations. The delivery of CMN279 Introduction to Professional Communication in hybrid

form (1 hour online/2 hour workshop) is in its second year, and Curriculum Committee has discussed the hybrid approach for other, select courses.

8. ASC Evaluation: The ASC assessment of the proposal for the *Bachelor of Arts in Professional Communication* degree program is as follows:

Overall the ASC considers the program design to be strong, innovative and well suited to meet the stated program goals. This is a flexible curriculum which allows students to apply core concepts across a wide range of fields, to pursue minors and to design elements of their own curriculum based on personal needs and interests. The curriculum is career-focused but, at the same time, built on a strong conceptual foundation. The program is also designed with pending changes to Ryerson's curriculum structure in mind.

Recommendation

Having satisfied itself of the merit of this proposal, ASC recommends:

That Senate approve the proposal for a new Bachelor of Arts degree program in Professional Communication.

Respectfully Submitted,

Chris Evans, Chair for the Committee

ASC Members:

Keith Alnwick, Registrar
Ian Baitz, Faculty of Communication and Design, Graphic Communications Management
Jennifer Cartwright, Ted Rogers School of Management, Business Management, Student ASC Member
Naomi Eichenlaub, Librarian, Library
Chris Evans, Vice-Chair and Vice Provost Academic
Jacob Friedman, Faculty of Engineering, Architecture, and Science, Mechanical and Industrial Engineering
Noel George, Faculty of Engineering, Architecture, and Science, Chemistry and Biology
Jacqui Gingras, Faculty of Community Services, Nutrition
Des Glynn, Chang School of Continuing Education
Andrew Hunter, Faculty of Arts, Philosophy
Suanne Kelman, Faculty of Communication and Design, Journalism
Tim McLaren, Ted Rogers School of Management, Information Technology Management
Pamela Robinson, Faculty of Community Services, Urban and Regional Planning
Diane Schulman, Secretary of Senate, Non-voting ASC Member
John Turtle, Faculty of Arts, Psychology
Andrew West, Faculty of Arts, Politics, Student ASC Member