- CFNY 406 Food Security: **Economics of Food Security**
- CFNY 407 Food Security: Community Development and Food Security
- CFNY 408 Food Security: Urban Food Security
- CFNY 409 Food Security: Gender and Food Security
- CINT 912 Interdisciplinary Studies: Community Development: International Field Experience
- CSOC 808 Sociology: Food and Foodways
- CVFN 233 Food Security: How Safe Is Our Food?
- CVFN 410 Food Security: Understanding Urban Agriculture
- CVFN 411 Food Security: Dimensions of Urban Agriculture
- CVFN 412 Food Security: Urban Agriculture Types
- CVFN 413 Food Security: Urban Agriculture Policy-Making

Note: CFND 401, CFNP 400, and CFNR 400 are only available in classroom to degree program and special students. For scheduling information, contact the Ryerson School of Nutrition.

Note to registered certificate program students Electives

CFNN 112 deleted. CFNY 409 (formerly CVFN 409), CVFN 410, CVFN 412, and CVFN 413 added.

Distance Education

The following courses are available in a distance education format.

CFNY 403 Food Security:

Food Security Concepts and Principles

CFNY 404 Food Security:

Food Policy and Programs for Food Security

CFNY 405 Food Security:

Applied Research Methods and Evaluation

CFNN III Nutrition:

Nutrition for Nursing Practice

CFNY 407 Food Security:

Community Development and Food Security

CFNY 408 Food Security: Urban Food Security

CFNY 409 Food Security:

Gender and Food Security

CVFN 410 Food Security:

Understanding Urban Agriculture

CVFN 411 Food Security:

Dimensions of Urban Agriculture

CVFN 412 Food Security:

Urban Agriculture Types

CVFN 413 Food Security:

Urban Agriculture Policy-Making

Course Delivery Schedule

	Fall 2011	Winter 2012	Spring/ Summer 2012			
Required	Required					
CFNY 403	I	I	I			
CFNY 404	I		I			
CFNY 405	I	I				
Electives						
CFND 401						
CFNN 111			I			
CFNP 400						
CFNR 400						
CFNY 400			CI			
CFNY 406		I				
CFNY 407			I			
CFNY 408		I				
CFNY 409	I					
CINT 912						
CSOC 808						
CVFN 233						
CVFN 410		I				
CVFN 411			I			
CVFN 412		I				
CVFN 413	I					

C = Classroom

CI = Classroom/Internet

F = Field Study, often international

I = Distance Education via Internet

O = Offered only through the degree program. Contact the Academic Coordinator, Reg Noble, for more

This schedule is subject to revision but can be used as a planning guide.

Fundamentals of Interior Design

Interior designers work in a dynamic, imaginative, and complex industry combining technological knowledge with artistic vision. This certificate is intended for individuals interested in the fundamentals of interior design:

- those who are considering interior design as a possible career and are prepared to enter a full-time interior design program upon completion of the certificate
- those who have a general interest in interior design Students should be aware that professional interior designers require membership in the Association of Registered Interior Designers of Ontario www.arido.ca. Membership is extended only to graduates of degree and diploma programs in recognized schools of interior design who have several years' experience and who successfully complete the Association's qualifying examinations.

Admission Requirements

OSSD with six Grade 12 U or M credits (including English and Mathematics), with a minimum average of 60 percent, or equivalent, or mature student status is required.

Students who have no previous experience in two- and three-dimensional creative design must successfully complete CDID 150 prior to registering in their first certificate course.

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of seven courses (four required courses and three electives), with a cumulative grade point average of 2.00 or higher, is required for the certificate. In determining the order of courses within the program, students should note carefully the prerequisite requirements listed with each course.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/ Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Required Courses

- CDID 150 Interior Design: Design Theory
- CDID 151 Interior Design: Interior Design I: Drafting
- CDID 152 Interior Design: Interior Design I: Space Planning
- · CIRC 102 Interior Design: Communications I

Electives (select three)

- CDID 153 Interior Design: Interior Materials and Finishes
- CDID 155 Interior Design: Design Dynamics I: Portfolio 1
- CDID 157 Interior Design: Kitchen and Bathroom Design
- · CIRH 101 Interior Design: History of Design I

Note to registered certificate students

Effective Fall 2010, the Certificate in Fundamentals of Interior Design has been revised. Students who were formally registered in the certificate prior to July 1, 2010, must complete the requirements in effect at the time of their registration.

The following changes thus reduce the number of courses for certificate requirement from nine to seven.

Required Courses

CDID 150 added.

CDID 153, CDID 155, and CIRH 101 are now Electives.

Electives

CDID 156 and CIRC 103 deleted. CDID 157 added.

Liberal Studies Elective deleted.

Fundraising Management

This certificate program has been developed to provide students with a sound understanding of the nonprofit and voluntary sector and the role that fundraising can play in support of organizations in this sector. Students will achieve the following:

- increase their understanding and skills in nonprofit sector fundraising management
- learn to plan a campaign
- develop and implement a wide range of strategies and tactics for a successful and ethical operation of a campaign

This program has been developed to prepare aspiring fundraising professionals for career entry, to help managers in nonprofit organizations expand their fundraising skills, and to provide growth and renewal opportunities for experienced professionals.

Academic Coordinator: Cathy Mann

For detailed certificate and program information, please visit www.ryerson.ca/ce/fundraising.

Admission Requirements

OSSD with six Grade 12 U or M credits, or equivalent, or mature student status.

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of six single-term courses, with a cumulative grade point average of 2.00 or higher, is required for the certificate.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/ Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Recommended Sequence

New students are encouraged to begin with CINT 916.

Required Courses

- CINP 912 Nonprofit: Marketing for NonProfit Organizations
- CINT 916 Interdisciplinary Studies: Introduction to Fundraising
- CVFM 201 Fundraising Management: Operation of Fundraising
- CVFM 202 Fundraising Management: Donor Centered Fundraising

Electives (select two)

- CVFM 203 Fundraising Management: Fundraising Campaign
- CVFM 302 Fundraising Management: Entrepreneurial Fundraising
- CVFM 303 Fundraising Management: Annual Giving Programs

Note to registered certificate program students Electives

CVFM 202 is now a Required Course. CVFM 303 added. CVFM 301 deleted.

Distance Education

The following courses are available in a distance education format.

CINP 912 Nonprofit:
Marketing for NonProfit Organizations
CINT 916 Interdisciplinary Studies:
Introduction to Fundraising
CVFM 202 Fundraising Management:
Donor Centered Fundraising
CVFM 302 Fundraising Management:
Entrepreneurial Fundraising

Gerontology

The Certificate in Gerontology is designed for professionals working with seniors, such as health and medical personnel, nutritionists, occupational therapists, social workers, family counsellors, recreation specialists, community workers, capacity assessors, administrators, urban planners, designers, personnel officers, volunteer workers, and anyone who wishes to learn about the field of gerontology.

The program draws faculty from many schools and departments within Ryerson, including Nursing, Social Work, Nutrition, Sociology, Politics and Public Administration, Psychology, Urban and Regional Planning, Early Childhood Education, and Family Studies. Participation from professionals in business, community services, and government is also an integral part of the Certificate in Gerontology.

The learning objectives of the certificate in Gerontology include the following:

- to comprehend the social, psychological, and biological theories that are applied within the field of gerontology, examining both normal and abnormal age-related changes that occur throughout the lifespan and their impact on practice
- to examine normal and abnormal age-related changes in social, psychological, and biological functioning and evaluate the implications of these changes on the individual's ability to interact with their social and physical environments
- to identify key changes in social roles, social supports, and policies that occur with aging within the areas of work and retirement, social and familial relationships, housing and environmental design, transportation and healthcare, and the law
- to recognize the diversity in aging as it relates to ethnicity, culture, gender, and sexuality and its impact on Canadian demography
- to analyze the current spectrum of cognitive variations associated with aging within the areas of intelligence, problem solving, learning and memory, personality, and mental health
- to identify and define both the quantitative and qualitative research methods, subject sampling techniques, approaches to assessing the validity and reliability of measurement instruments, and the significance of research ethics applied within the field of gerontology

- to identify how each component of a scientific research investigation contributes to the content knowledge within the field of gerontology and apply the appropriate steps to enable data assembly and data analysis
- to systematically interpret and critique research findings within the field and determine their implications for the practice of gerontology, and to examine the future trends in gerontology research and education

Academic Coordinator: Pria Nippak

Admission Requirements

OSSD with six Grade 12 U or M credits, or equivalent, or mature student status is required.

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of six single-term courses or their equivalent, with a cumulative grade point average of 2.00 or higher, is required for certificate completion.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/ Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Recommended Sequence

It is highly recommended that students working toward the Certificate in Gerontology start with CVGE 140 or CVGE 141, then proceed with their electives before taking CINT 901 or CVGE 205.

Required Courses

- CINT 901 Interdisciplinary Studies: Gerontology: Critical Issues and Future Trends
- CVGE 140 Gerontology: Gerontology: Aging and the Individual
- CVGE 141 Gerontology: Aging and Society
- CVGE 205 Gerontology: Understanding Research

Electives (select two)

- CGER 298 Gerontology: Ability, Disability and Aging
- CINT 904 Interdisciplinary Studies: Health Promotion and Community Development
- CPSY 402 Psychology: Adult Development
- CPSY 802 Psychology: Death, Dying, and Bereavement
- CSOC 606 Sociology:
 Work and Families in the 21st Century
- CVGE 271 Gerontology: Consent, Capacity and Decision Making
- CVGE 297 Gerontology: Aging and Interpersonal Skills
- CVLT 102 Long Term Care:
 Principles of Long Term Care Service Delivery

Note to registered certificate program students Electives

CFNF 401, COPS 608, CVGE 202, CVGE 272, CVGE 291, and CVGE 296 deleted.

Distance Education

The following courses are available in a distance education format.

CINT 901 Interdisciplinary Studies: Gerontology: Critical Issues and Future Trends

CVGE 140 Gerontology:

Gerontology: Aging and the Individual

CVGE 141 Gerontology: Aging and Society

CVGE 205 Gerontology: Understanding Research

CINT 904 Interdisciplinary Studies:

Health Promotion and Community Development

Global Management Studies

Formerly: International Business

This program is designed for individuals who want to build on their existing cultural knowledge, language advantages, or Canadian business experience to deal effectively with globalization and international business issues. It is a unique experience: a combination of excellent university credit courses to select from and an individual single-term Practicum under the guidance of the academic coordinator.

Academic Coordinator: Carlyle Farrell

Admission Requirements

OSSD with six Grade 12 U or M credits, or equivalent, or mature student status. Eligible applicants must have also completed the following courses or equivalents:

- CGMS 200 Global Management: Introduction to Global Management
- CGMS 401 Global Management:
 Operations Management
- CMKT 100 Marketing: Principles of Marketing Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of six courses, including a single-term Practicum, with a cumulative grade point average of 2.00 or higher, is required for the certificate.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Required Courses

- CGMS 522 Global Management: International Marketing
- CGMS 723 Global Management: International Trade
- CGMS 724 Global Management: Management of International Enterprise
- CZIB 100 International Business:
 Practicum in International Business

Electives (select two)

- CFIN 621 Finance: International Finance
- CGMS 450 Global Management: Project Management
- CGMS 601 Management: International Economics
- CGMS 690 Global Management:
 The North American Business Environment
- CGMS 691 Global Management:
 The Asian Business Environment
- CGMS 692 Global Management:
 The European Business Environment
- CGMS 695 Global Management: The Middle Eastern Business Environment
- CGMS 802 Global Management: Ethics and Regulation of Intn'l Bus
- CGMS 805 Global Management: Manufacturing Management
- CLAW 724 International Business Law: Legal Aspects of International Business

Note to registered certificate program students

Effective Fall 2011, the Certificate in International Business has been revised to Global Management Studies. Students who were formally registered in the certificate prior to July 1, 2011, must complete the requirements in effect at the time of their registration.

The following changes thus reduce the number of courses in the certificate from nine to six.

Required Courses

CLAW 724 is now an Elective.

CCMN 443, CLAW 724, and CMHR 700 deleted. CGMS 724 added.

Electives

CECN 503, CECN 606, CECN 607, CECN 609, CECN 707, CECN 721, CECN 802, CECN 821, CGMS 550, CGMS 724, CHST 500, CITM 350, CLAW 723, CPHL 307, and CPOL 607 deleted. CGMS 450, CGMS 601, CGMS 690, CGMS 691, CGMS 692, CGMS 695, CGMS 802, and CGMS 805 added.

Distance Education

The following courses are available in a distance education format.

CECN 606 Economics:

International Monetary Economics

CGMS 550 Global Management:

Business-to-Business e-Commerce

CITM 350 Business Technology Management:

Concepts of e-Business

CECN 104 Economics:

Introductory Microeconomics

CECN 204 Economics:

Introductory Macroeconomics

CMHR 405 Human Resources:

Organizational Behaviour and Interpersonal Skills CMKT 100 Marketing: Principles of Marketing

Graphic Communications

Graphic communications is one of the most dynamic and exciting industries in Canada today. The preparation of layouts, files, proofs, and finished jobs in the printing industry requires the use of advanced hardware, software, and technology. Knowledgeable and skilled professionals in the field are rewarded with challenging opportunities.

This certificate is of particular interest to individuals who wish to enhance their ability to advance professionally and to those seeking the necessary knowledge and skills to make a career change into the graphic communications industry. Students may enroll directly into entry-level courses. No interview or portfolio is required.

Admission Requirements

OSSD with six Grade 12 U or M credits, with minimum average of 60 percent, or equivalent, or mature student status with relevant professional experience is required.

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of 7 courses, with a cumulative grade point average of 2.00 or higher, is required for the certificate.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Required Courses

- CDGA 651 Graphic Communications: Graphic Communications Processes
- CGRA 102 Graphic Communications: Layout and Typography I
- CGRA 103 Graphic Communications: Introduction to Electronic Premedia I
- CGRA 104 Graphic Communications: Printing Processes I

Electives (select three)

- CGRA 116 Graphic Communications: Estimating in the Graphic Arts
- CGRA 202 Graphic Communications: Layout and Typography II
- CGRA 203 Graphic Communications: Introduction to Electronic Premedia II
- CGRA 204 Graphic Communications: Printing Processes II
- CGRA 230 Graphic Communications: Selling in the Graphic Arts
- CGRA 320 Graphic Communications: Binding and Finishing I

Note to registered certificate program students

Effective Fall 2011, the Certificate in Graphic Communications has been revised. Students who were formally registered in the certificate prior to July 1, 2011, must complete the requirements in effect at the time of their registration.

The following changes thus reduce the number of courses in the certificate from ten to seven:

Required

CGRA 116, CGRA 202, CGRA 203, CGRA 204, and CGRA 230 are now Electives.

CMKT 100 deleted.

Electives

Elective group added; students select three courses. CGRA 320 added.

Advanced Standing

Students who successfully complete the Certificate in Graphic Communications and two single-term Liberal Studies courses from Table A (see the Ryerson Undergraduate Program Calendar at www.ryerson.ca/calendar for more information), and the two courses CGMS 200 and CCMN 279, may be considered, subject to an interview and normal program admission criteria and procedures, for direct entry into the second year of the Graphic Communications Management degree program.

Consideration is currently being given to the development of a second (advanced) certificate in Graphic Communications, where upon successful completion of both certificates, students will be considered for direct entry into third year of the Graphic Communications Management undergraduate degree program. Please indicate any interest to The Chang School at 416.979.5035 or ce@ryerson.ca.

Distance Education

The following courses are available in a distance education format.

CGRA 116 Graphic Communications: Estimating in the Graphic Arts CMKT 100 Marketing: Principles of Marketing

Health Informatics

The demand for skilled workers in the field of Health Informatics is growing rapidly in response to the need to deliver less expensive and higher quality health care. Designed for Canadian and internationally educated professionals who have a background in health or information technology, the program allows you to choose courses that will give you the skills you need for this expanding field.

Admission Requirements

OSSD with six Grade 12 U or M credits, or equivalent, or mature student status, and a minimum of one years' related professional experience in the health or information technology sectors is required.

Admission Application

Students seeking admission to this program are required to complete an application for pre-approval and submit it to the academic coordinator. To obtain an application, visit Forms and Documents. The completed application, together with transcripts, may be presented to the academic coordinator during the Open House, or mailed to the address on the form.

continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Undergraduate students wishing to pursue a

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of eight courses (four required courses and four electives), with a cumulative grade point average of 2.00 or higher, is required for the certificate.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and

Core Knowledge CHIT 100 **CHIT 201** CHIT 300 **CHSM 301** (4 Required Courses) **Healthcare Professionals IT Professionals CITM 301 CHIM 300 CITM 305 CHSM 305 Elective Streams** IT Focus **CITM 410 CITM 500** background) **CITM 750** Specialized content students' skills **HR Focus CMHR 405** (may select CMHR courses) and knowledge, as well as suppor their individual **CMHR 650** rofessional goals **CZLW 100 CZLW 110** Health System Focus **CHIM 404 CHIM 405**

transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Required Courses

- CHIT 100 Health Information Technology: Intro to Health Informatics
- CHIT 201 Health Information Technology: Healthcare Interoperability
- CHIT 300 Health Information Technology: Intro to Healthcare Human Comp Interface
- CHSM 301 Health Services Management: The Healthcare Systems

Electives (select four)

- CHIM 300 Health Information Management: Managing Health Information Services
- CHIM 404 Health Information Management: Health Economics
- CHIM 405 Health Information Management: Issues in Health Information Management
- CHSM 305 Health Services Management: The Management Cycle
- CITM 301 Information Technology Management: Introduction to IT Infrastructure
- CITM 410 Information Technology Management: Business Process Design
- CITM 500 Information Technology Management: Logical Database Analysis and Design
- CITM 505 Information Technology Management: Managing Information Systems
- CITM 750 Information Technology Management: IT Project Management
- CMHR 405 Human Resources: Organizational Behaviour and Interpersonal Skills
- CMHR 650 Human Resources: Management of Change
- CZLW 100 Law: Information Access and Protection of Privacy
- CZLW 110 Law: Health Info Access and Privacy

Distance Education

The following courses are available in a distance education format.

CHSM 301 Health Services Management: The Healthcare Systems

CHIM 300 Health Information Management: Managing Health Information Services

CHIM 404 Health Information Management: Health Economics

CHIM 405 Health Information Management: Issues in Health Information Management

CHSM 305 Health Services Management: The Management Cycle

CITM 750 Information Technology Management: IT Project Management

CMHR 405 Human Resources: Organizational Behaviour and Interpersonal Skills

Health Services Management

This certificate program provides management education for the health service industry both now and in the foreseeable future. This program provides an opportunity for current and potential health care managers to increase their knowledge and skills in significant aspects of health service provision. Many of the courses in the Health Services Management certificate program qualify for exemptions in the part-time degree completion program in Health Services Management (see the Ryerson Undergraduate Part-Time Degree Studies Calendar at www.ryerson.ca/calendar for more information).

Admission Requirements

OSSD with six Grade 12 U or M credits or equivalent or mature student status and a minimum of three years in a health services organization; OR a Community College diploma in a related health services field; AND the approval of the academic coordinator are required. An interview may be required.

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of nine courses, with a cumulative grade point average of 2.00 or higher, is required for the certificate. Up to four course credits may be granted on the basis of courses successfully completed at other institutions.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/ Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Required Courses (select six)

Students may select only one of CHSM 407 or CVNU 321. Students who wish to progress to the degree program should take CHSM 407. Students seeking the certificate only may take CVNU 321, which has no prerequisite.

- CCMN 279 Communication: Introduction to Professional Communication
- CHSM 301 Health Services Management: The Healthcare Systems
- CHSM 305 Health Services Management: The Management Cycle
- CHSM 326 Health Services Management: Law for Health Managers
- CHSM 407 Health Services Management: Financial Management
- CHSM 437 Health Services Management: Human Resources Management
- CVNU 321 Nursing: Financial Management

Electives (select three)

- CHSM 306 Health Services Management: Management Leadership and Decision-Making
- CHSM 417 Health Services Management: Research Methodology
- CVHS 450 Health Services Management: Institutional Structure
- CVLT 102 Long Term Care:
 Principles of Long Term Care Service Delivery
- CVLT 401 Long Term Care: Project
 Management in Long Term Care Administration
- CVLT 502 Long Term Care: Trends in Long Term Care Service Delivery

Note to registered certificate program students

Effective Fall 2006, the Certificate in Health Services Management has been revised. Students who were formally registered in the certificate prior to July 1, 2006, must complete the requirements in effect at the time of their registration.

CHSM 315 and CHSM 316 deleted. CHSM 301 added.

Distance Education

The following courses are available in a distance education format.

CCMN 279 Communication:
Introduction to Professional Communication
CHSM 301 Health Services Management:
The Healthcare Systems
CHSM 305 Health Services Management:
The Management Cycle
CHSM 326 Health Services Management:
Law for Health Managers
CHSM 437 Health Services Management:
Human Resources Management
CVLT 502 Long Term Care:
Trends in Long Term Care Service Delivery

Human Resources Management

This certificate program provides comprehensive education in current human resources management techniques. It is ideal for human resources management professionals who wish to expand or update their skills, and for those seeking employment in the human resources field.

Many of the courses in the Human Resources Management certificate program may qualify for exemptions in the Certified Human Resources Professional (CHRP) designation offered by the Human Resources Professionals Association (HRPA) (www.hrpa.ca).

Admission Requirements

OSSD with six Grade 12 U or M credits, or equivalent, or mature student status, with some experience in business is required.

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of six courses, with a cumulative grade point average of 2.00 or higher, is required for the certificate. Up to three course credits may be granted on the basis of courses successfully completed at other institutions.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Required Courses

- CMHR 405 Human Resources: Organizational Behaviour and Interpersonal Skills
- CMHR 523 Human Resources: Human Resources Management

Electives (select four)

- CACC 100 Accounting: Introductory Financial Accounting
- CLAW 529 Law: Employment and Labour Law
- CMHR 505 Human Resources: Organizational Behaviour II
- CMHR 522 Human Resources: Industrial Relations
- CMHR 600 Human Resources: Diversity and Equity in the Workplace
- CMHR 623 Human Resources: Recruitment and Selection (Staffing)
- CMHR 670 Human Resources: Special Topics in Org Behav and HR Mgmt
- CMHR 671 Human Resources: Human Resources Information Systems
- CMHR 711 Human Resources: Occupational Health and Safety
- CMHR 733 Human Resources: Training and Development
- CMHR 749 Human Resources: Compensation Management
- CMHR 849 Human Resources: Human Resources Planning

Note to registered certificate program students

This certificate has been revised effective July I, 2007. Students who formally registered in the certificate prior to July I, 2007, must complete the program requirements in effect at the time they registered. For further information, please contact the program assistant for Business at 416.979.5310. **Required Courses**

CMHR 505 and CMHR 522 deleted.

Electives

CCMN 279, CECN 104, CFIN 300, COHS 208, COHS 718, and CQMS 102 deleted. CMHR 505, CMHR 522, CMHR 670, CMHR 671, CMHR 711, CMHR 749 and CMHR 849 added.

Distance Education

The following courses are available in a distance education format.

CMHR 405 Human Resources: Organizational Behaviour and Interpersonal Skills

CMHR 523 Human Resources: Human Resources Management

CACC 100 Accounting: Introductory Financial Accounting

IBM Mainframe System z Computing

Mainframe computers are complex hardware systems used by large corporations and government institutions for mission critical applications such as intensive data processing, management information systems, financial transaction processing, manufacturing control systems, and for managing large databases including census statistics and financial data. Mainframe computers are a significant segment of the IBM product line. They are used for large scale simultaneous processing of very large information databases. Security of data warehousing and accuracy of processing are of paramount importance. They require sophisticated and specialized computer programming management and maintenance.

This certificate, developed in partnership with IBM Canada, will provide students with a thorough overview of the Mainframe environment, including hardware systems, workflows, end-user interfaces, programming, and data management. The curriculum is designed to provide graduates with a comprehensive education and practical knowledge in basic and advanced Mainframe computing focused on the z/OS environment.

For detailed certificate and program information, please visit **www.ryerson.ca/ce/mainframe**.

Admission Requirements

Eligible applicants must have completed an undergraduate degree in computer sciences or related field or have clear academic standing in the final year of such a degree program or have significant related employment experience.

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Admission Process

Applicants must complete an application for pre-approval and be approved before registering for the first course. Applicants wishing to enroll in the first course must provide a resume listing employment experience, copies of credentials or academic standing, and certification documents. For further information on the program requirements please contact the Program Manager, Janet Shusterman, at 416.979.5000, ext. 7907.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of six courses, with a cumulative grade point average of 2.00 or higher, is required for the certificate.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/ Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Required Courses

• CKCS 191 Mainframe Computing: Introduction to Mainframe Computing z/OS Environment

Electives (select 5)

- CKCS 192 Mainframe Computing: Mainframe Application Programming ASSEMBLER
- CKCS 193 Mainframe Computing: Mainframe Application Programming COBOL
- CKCS 194 Mainframe Computing: Mainframe Batch Programming JCL
- CKCS 195 Mainframe Computing: Mainframe Online Programming: CICS
- CKCS 196 Mainframe Computing: Mainframe Database Management Systems DB2
- CKCS 197 Mainframe Computing: Websphere Application Server on z/OS

Image Arts (with specializations in Film Studies, New Media, or Photography Studies)

This certificate is designed to lead to careers in the film, photography, new media, communications, and cultural industries. Graduates should be capable of performing responsibly in these industries as professionals in both creative and managerial positions, and in undertakings ranging from the highly commercial to the artistic and experimental. The curriculum will also provide students with the necessary grounding to move on to advanced study in a variety of media-related academic and artistic disciplines.

This program provides a general background in design, art history, and cultural studies, along with professional specialization in the three areas of Film, New Media, and Photography Studies. There is a strong link between theory and practice in each of these options.

Successful completion of the certificate will make a student eligible to apply for admission to the second year of the related Image Arts degree program, subject to space availability and competition. These students will also be required to take the appropriate Liberal Studies courses.

Film Studies Coordinator: James Warrack, jwarrack@ryerson.ca

New Media Coordinator: Rhonda Abrams, rabrams@ryerson.ca

Photography Studies Coordinator: Dennis Miles, dmiles@ryerson.ca

Admission Requirements

OSSD with six Grade 12 U or M credits (including English), or equivalent, with a minimum average of 60 percent, or mature student status with relevant professional experience is required.

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of eight single-term (or equivalent) courses is required for the certificate, as listed in each option.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Equipment/Facilities Use

Please note that equipment and facilities use outside of class time will not be provided.

Required Courses

- CDNM IIO New Media:
 Image History I: Twentieth Century Art
- CDNM III New Media: Image Theory I: Image Analysis
- CDNM 113 New Media: Visual Studies I
- CDNM 210 New Media: Image History II: Contemporary Art

This certificate offers concentrations in either Film Studies, New Media, or Photography Studies. Students must fulfill the requirements of one of these three areas as listed below.

Specialization in Film Studies

- CDMP 117 Film Studies: Film Technology I
- CDMP 129 Film Studies: Motion Picture Production I
- CDMP 223 Film Studies: Film Technology II

Specialization in New Media

- CDNM 109 New Media: Introduction to Web Presentation
- CDNM 121 New Media:
 Introduction to Interaction Design
- CDNM 209 New Media: Flash for New Media
- CDNM 221 New Media:
 Video and Audio for New Media

Specialization in Photography

- CDFP 320 Photography: Techniques of Photography I
- CDFP 321 Photography: Techniques of Photography II
- CDFP 385 Photography: Digital Tools I
- CDFP 386 Photography: Digital Tools II

Note to registered certificate program students Required Courses

CDNM 211 and CDNM 213 deleted.

Elective Sets

CFSN 100 deleted (from Set A), therefore CDNM 110 and CDNM 210 (from Set B) have become required courses in all specializations.
CDMP 129 replaces CDMP 12A/B and CDMP 012.

CDMP 129 is a multi-term course.

Specialization in New Media

CDNM 112, CDNM 116, CDNM 212, CDNM 214, and CDNM 322 deleted.

CDNM 109, CDNM 209, CDNM 121, and CDNM 221 added.

Industrial Organization and Policy

The Certificate in Industrial Organization and Policy is designed to provide students with the analytic and quantitative skills that are necessary to gain experience in the theory and practice of industrial organization and in other related fields of economics.

For other economics certificates, please visit www.ryerson.ca/ce/economics.

Academic Coordinator: Michael Jolly, mjolly@ryerson.ca..

Admission Requirements

OSSD with six Grade 12 U (including Grade 12 U credits in English and Mathematics) or M credits, or equivalent, or mature student status.

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of eight courses, with a cumulative grade point average of 2.00 or higher, is required for the certificate.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Required Courses

- CECN 104 Economics: Introductory Microeconomics
- CECN 129 Economics: Statistics for Economics I
- CECN 204 Economics: Introductory Macroeconomics
- CECN 501 Economics: Industrial Organization
- CECN 504 Economics: Intermediate Microeconomics I

Electives (select three)

- CECN 230 Economics: Mathematics for Economics
- CECN 321 Economics: Introduction to Law and Economics
- CECN 329 Economics: Statistics for Economics II
- CECN 601 Economics: The Economics of Information
- CECN 614 Economics: An Introduction to Game Theory
- CECN 700 Economics: Intermediate Microeconomics II
- CMTH 189 Mathematics: Introduction to Mathematics for Economics

Note to registered certificate program students Electives

CMTH 240 deleted.

Distance Education

The following courses are available in a distance education format.

CECN 104 Economics:
Introductory Microeconomics

CECN 204 Economics:
Introductory Macroeconomics

Information Systems Development

The Certificate in Information Systems Development will not be accepting any new registrants. The certificate has been discontinued effective Fall 2011. Students formally registered in the certificate prior to June 30, 2011, must complete the program requirements in effect at the time they registered. For further information, please contact the Business area at 416.979.5035.

Information Systems Management

Virtually every type of business today relies on information technology. Whether banking online, ordering a pizza, monitoring patients in a hospital, or publishing a newspaper, organizations must develop systems that serve their customers and help them succeed. Computers, the Internet, wireless communications, databases - all are forms of information technology which are used to collect, analyze, and share information. Information systems management examines how this technology can be used effectively in an ever-changing business context. Courses focus on how to develop and manage information systems to meet the strategic needs of business and government. This certificate stands alone as an introduction to the IT management field, but it also provides a smooth transition either to another more specialized certificate or to the Information Technology Management degree program. All courses can be credited toward Ryerson's Bachelor of Commerce (Information Technology Management) degree program.

For further information about the program, please contact The Chang School at 416.979.5035, or attend a Program Open House.

For detailed certificate and program information, please visit www.ryerson.ca/ce/itm.

Admission Requirements

OSSD with six Grade 12 U or M credits, or equivalent, or mature student status is required.

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of six single-term courses, with a cumulative grade point average of 2.00 or higher, is required for the certificate.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Required Courses

- CITM 100 Business Technology Management: Business and Information Systems
- CITM 305 Business Technology Management: Systems Analysis and Design
- CITM 410 Business Technology Management: Business Process Design

Electives (select three)

- CITM 200 Business Technology Management: Fundamentals of Programming
- CITM 301 Business Technology Management: Introduction to IT Infrastructure
- CITM 350 Business Technology Management: Concepts of e-Business
- CITM 407 Business Technology Management: Info Tech, Ethics, and Society
- CITM 500 Business Technology Management: Logical Database Analysis and Design
- CITM 750 Business Technology Management: IT Project Management

Note to registered certificate program students

This certificate has been revised effective July 1, 2009. Students who formally registered in the certificate prior to July 1, 2009, must complete the program requirements in effect at the time they registered.

Required Courses

CITM 410 replaces CITM 505,

Electives

CITM 350 replaces CITM 330.

Distance Education

The following courses are available in a distance education format.

CITM 100 Business Technology Management: Business and Information Systems

CITM 305 Business Technology Management: Systems Analysis and Design

CITM 350 Business Technology Management: Concepts of e-Business

CITM 750 Business Technology Management: IT Project Management

Internationally-Educated Engineers Qualification Bridging (IEEQB) Program

The Faculty of Engineering, Architecture, and Science at Ryerson University has developed the Internationally-Educated Engineers Qualification Bridging (IEEQB) Program specifically for internationally-educated engineers to provide them with an opportunity to meet the academic requirements for professional engineering licensure in Ontario.

For further information and admission requirements, visit www.feas.ryerson.ca/styles/1/ieeqb_program.

Introductory International Economics

The Certificate in Introductory International Economics is designed to equip students with skills in international economic analysis. It provides a thorough grounding in economic theory and access to applied courses dealing with a variety of important issues of relevance to international economic affairs. For other economics certificates, please visit www.ryerson.ca/ce/economics.

Academic Coordinator: Michael Jolly, mjolly@ryerson.ca.

Admission Requirements

OSSD with six Grade 12 U (including Grade 12 U credits in English and Mathematics) or M credits, or equivalent, or mature student status.

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of eight courses, with a cumulative grade point average of 2.00 or higher, is required for the certificate.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/ Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Required Courses

- CECN 104 Economics: Introductory Microeconomics
- CECN 129 Economics: Statistics for Economics I
- CECN 204 Economics: Introductory Macroeconomics
- CECN 301 Economics:
 Intermediate Macroeconomics I
- CECN 504 Economics: Intermediate Microeconomics I

Electives (select three)

- CECN 220 Economics: Evolution of the Global Economy
- CECN 330 Economics:
 Economic Systems in the New World Economy
- CECN 501 Economics: Industrial Organization
- CECN 503 Economics: Economic Development
- CECN 606 Economics: International Monetary Economics
- CECN 609 Economics:
 European Economic Development
- CECN 707 Economics:
- Economics of International Trade
- CECN 802 Economics:
 The Economies of East Asia

Distance Education

The following courses are available in a distance education format.

CECN 104 Economics:

Introductory Microeconomics

CECN 204 Economics:

Introductory Macroeconomics

CECN 606 Economics:

International Monetary Economics

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Laboratory Practices Management

This certificate program has been developed for professionals currently practicing or anticipating careers in science related fields. This program has been designed to equip graduates with managerial skills combined with practical knowledge (ranging from safety, environmental awareness, standards and regulations, specialized information technology systems, effective communications, recordkeeping, and technical writing) that laboratory work requires.

Admission Requirements

Applicants must complete an application for pre-approval form, be approved by the academic coordinator, and meet one of the following criteria: Undergraduate degree in a relevant field (e.g., Chemistry, Biology, Physics, or Environmental or Earth Science) with a GPA of 2.0, or equivalent

OR

A post-secondary diploma with a GPA of 2.0, or equivalent, subject to the approval of the academic coordinator

OR

Three years of professional practice in a laboratory setting in a technical capacity, subject to the approval of the academic coordinator

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Admission Application

Students seeking admission to this program are required to complete an application for pre-approval and submit it to the academic coordinator. To obtain an application, visit Forms and Documents. The completed application, together with transcripts, may be presented to the academic coordinator during the Open House, or mailed to the address on the form.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of 12 21-hour courses, with a cumulative grade point average of 2.00 or higher, is required for the certificate.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/ Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Required Courses

- CKLP 100 Laboratory Practice: Professional Laboratory Practice
- CKLP IIO Laboratory Practice: Standards and Good Practices
- CKLP 120 Laboratory Practice: Intro to Lab Project Management
- CKLP 130 Laboratory Practice: Intro to Laboratory Regulations
- CKLP 140 Laboratory Practice: Laboratory and Research Ethics
- CKLP 150 Laboratory Practice: Sample Management
- CKLP 160 Laboratory Practice: Laboratory Info Management
- CKLP 170 Laboratory Practice: Data Handling

Electives (select four)

- CKLP 180 Laboratory Practice: Applied Technical Writing
- CKLP 190 Laboratory Practice: Skills for Professional Practice
- CKLP 200 Laboratory Practice: Intro to Intellectual Property
- CKLP 210 Laboratory Practice: Laboratory Quality Processes
- CKLP 220 Laboratory Practice: Independent Study I
- CKLP 230 Laboratory Practice: Independent Study II
- CKLP 240 Laboratory Practice: Fundamentals of Clinical Research
- CKLP 250 Laboratory Practice: Current Topics in Lab Science

Distance Education

The following courses are available in a distance education format.

CKLP 100 Laboratory Practice: Professional Laboratory Practice

CKLP IIO Laboratory Practice: Standards and Good Practices

CKLP 120 Laboratory Practice: Intro to Lab Project Management

CKLP 130 Laboratory Practice: Intro to Laboratory Regulations

CKLP 140 Laboratory Practice: Laboratory and Research Ethics

CKLP 150 Laboratory Practice: Sample Management CKLP 160 Laboratory Practice: Laboratory Info Management

CKLP 170 Laboratory Practice: Data Handling
CKLP 180 Laboratory Practice: Applied Technical
Writing

CKLP 190 Laboratory Practice: Skills for Professional Practice

CKLP 200 Laboratory Practice: Intro to Intellectual Property

CKLP 210 Laboratory Practice: Laboratory Quality Processes

CKLP 240 Laboratory Practice: Fundamentals of Clinical Research

CKLP 250 Laboratory Practice: Current Topics in Lab Science

Landscape Design

Note: Many of the courses in this program are available by distance education.

Landscape Design combines the fields of art, science, and humanities. Landscape designers focus on designing and restoring sustainable public and private outdoor spaces. Their services are sought in the residential, commercial, and public sectors. Whether you are just beginning or continuing your education in Landscape Design, this certificate offers an excellent education in the fundamental components that comprise the field of landscape design. Through course offerings, you will learn how to analyze, plan, design, manage, and sustain the built and natural environment.

Courses are offered in a combination of lectures, field trips, studios, seminars, and other interactive learning opportunities. Our distance education courses continue to be developed and are available on the Internet. Ryerson University and Toronto Botanical Garden have recently developed an educational partnership. A number of courses are now delivered at the Toronto Botanical Garden at 777 Lawrence Avenue East.

Important note to students who formally registered in the certificate prior to July 1, 2009: If you registered in the Certificate in Landscape Design prior to July 1, 2009, you must complete the program requirements that were in effect at the time you registered, please see the Transition Plan. For more information on the changes to the certificate, please see the Landscape Design Changes Presentation.

For detailed certificate and program information, please visit **www.ryerson.ca/ce/landscape**.

See more courses and programs relating to Design or Science and Engineering.

Admission Requirements

Applicants admitted to this program will normally possess a post-secondary undergraduate education (university or college) in a relevant field of study including programs related to architecture and or environmental sciences or mature student status with relevant work experience.

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Note: The Open House session for the Landscape Design certificate program is held along with Engineering, Architecture, and Science.

Certificate Requirements

The successful completion of six courses, with a cumulative grade point average of 2.00 or higher, is required for the certificate.

For further information about the program, please contact the Acting Academic Coordinator, Sam Benvie at sbenvie@ryerson.ca.

Note for Current Students:

As of Fall 2009, the Ryerson University Senate has approved revisions to this certificate that result in a change of the number of required courses from 8 to 6, the addition of new courses, and the revision or deletion of existing courses. The Senate also approved that students currently enrolled in this certificate can, if appropriate, be allowed to move to the revised 6 course certificate curriculum.

To move to the revised certificate please complete The G. Raymond Chang School of Continuing Education Certificate Program Registration/ Transfer Form and submit the completed form to The Chang School (marked to the attention of Peter Monkhouse) in person, by fax, by email, or by mail. Once received, The Chang School will review the completed form and let you know which courses you must take to complete the certificate. Note: not all completed courses will apply to the revised certificate. View the letter sent to current certificate learners for more information.

If you have any questions, please contact The Chang School at 416.979.5035 or ce@ryerson.ca to discuss your specific situation.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/ Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Sample Certificate Completion Models

Certificate-completion models offer combinations of courses that have been developed to assist you in completing your certificate in three, four, or six terms. Planning your studies according to one of these models allow you to complete your certificate at a pace suitable to you.

Required Courses

The order in which the required courses are taken should be considered carefully so as to meet the prerequisites for the desired elective courses.

- CKLA 300 Landscape Design: Landscape Design Communications and Theory
- CKLA 310 Landscape Design: Landscape Construction, Materials and Methods
- CKLA 320 Landscape Design: Plant Materials
- CKLA 330 Landscape Design: Landscape Design Studio

Electives (select two)

- CKLA 400 Landscape Design: Ecology and Sustainable Landscapes
- CKLA 410 Landscape Design: Horticultural Science
- CKLA 420 Landscape Design: Art and Management of Planting Design
- CKLA 430 Landscape Design: Making and Meaning of Landscapes
- CKLA 440 Landscape Design: Digital Landscape Design
- CKLA 450 Landscape Design: Landscape Restoration

Note to registered certificate program students

This certificate has been revised effective July I, 2009. Students who formally registered in the certificate prior to July I, 2009, must complete the program requirements in effect at the time they registered.

Distance Education

The following courses are available in a distance education format.

CKLA 300 Landscape Design:

Landscape Design Communications and Theory

CKLA 310 Landscape Design:

Landscape Construction, Materials and Methods

CKLA 320 Landscape Design: Plant Materials

CKLA 330 Landscape Design:

Landscape Design Studio

CKLA 400 Landscape Design:

Ecology and Sustainable Landscapes

CKLA 410 Landscape Design:

Horticultural Science

CKLA 420 Landscape Design: Art and Management of Planting Design

CKLA 440 Landscape Design:

Digital Landscape Design

Course Delivery Schedule

	Fall 2011	vvinter 2012	Spring/ Summer 2012
Required			
CKLA 300		TC	I
CKLA 310	I		С
CKLA 320	TC	I	
CKLA 330	С	I	
Electives			
CKLA 400	I		С
CKLA 410	I	С	
CKLA 420	I	С	
CKLA 430	С		
CKLA 440	С	I	
CKLA 450	С		

Fall 2011 Winter 2012 | Spring/

C = Classroom

I = Distance: Internet

T = Toronto Botanical Garden (TBG)

This schedule is subject to revision but can be used as a planning guide.

Leadership and Management for Nurses

Note: Many of the courses in this program are available by distance education.

Nurses are on the front line in terms of professional and organizational transformation. Case or care management, program management, self-management, entrepreneurship, middle and upper management – all of these require nurses to understand the larger system, have a critical consciousness about their place in that system, and an ability to generate and participate in strategies that move the system in the desired direction.

The certificate program is designed for front-line nurses as well as those with functional management responsibilities. The electives that ensure more courses are available are relevant to multiple contexts. Interdisciplinary choices ensure the courses will increase the knowledge and skill nurses need to be effective in their environments.

This eight-course certificate includes four required Nursing courses and four elective courses. These are available at Ryerson through a combination of online and in-class learning, and at our regional access centres located throughout Southern Ontario. Registered nurses can access the certificate by completing the Application for Registration in a Continuing Education Certificate Program and by registering for the courses. Most of the courses in the certificate are a credit in the BScN program. Nurses who already have completed a baccalaureate degree may be eligible for advanced standing within the certificate.

For detailed certificate and program information, please visit www.ryerson.ca/ce/nursing.

Admission Requirements

Registered Nurse with a Certificate of Registration from the College of Nurses of Ontario or eligibility for same is required.

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of eight single-term courses, with a cumulative grade point average of 2.00 or higher (i.e., a minimum grade of C or 63 percent), is required for the certificate.

Regional Access Centres

The expansion of regional access centres, along with flexible timing and delivery modes, is increasing the nursing community's access to Ryerson nursing education. Some of the courses in this certificate are now available at selected agencies in the community. For more information, please see the course descriptions.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Required Courses

- CNUR 805 Nursing:
 The Evolution of Theoretical Knowledge
- CNUR 830 Nursing:
- Current Issues and Future Perspectives
- CNUR 831 Nursing: Leadership Development for Practice
- CNUR 833 Nursing: Organizational Context of Practice

Electives – Group A (select two)

- CHSM 305 Health Services Management: The Management Cycle
- CMHR 505 Human Resources: Organizational Behaviour II
- CMHR 522 Human Resources: Industrial Relations
- CMHR 523 Human Resources: Human Resources Management
- CMHR 600 Human Resources: Diversity and Equity in the Workplace
- CMHR 623 Human Resources: Recruitment and Selection (Staffing)

Note: Students who have completed CNUR 831 and CNUR 833 may register in CMHR 505 without having completed the prerequisite, CMHR 405.
Two of CMHR 505, CMHR 522, CMHR 523, and CMHR 623 may be credited to the BScN Program.

Electives - Group B (select two)

- CVNU 317 Nursing: Health and Social Policy
- CVNU 320 Nursing: Health Law
- CVNU 321 Nursing: Financial Management
- CVNU 322 Nursing: Computer and Information Management in Nursing

Please Note: The required courses in this certificate may be credited toward the BScN program. Group B Electives (CVNU 317, CVNU 320, CVNU 321, or CVNU 322) may be used as substitution for a Nursing Elective in the BScN program.

Distance Education

The following courses are available in a distance education format.

CNUR 830 Nursing:

Current Issues and Future Perspectives

CNUR 831 Nursing:

Leadership Development for Practice

CNUR 833 Nursing:

Organizational Context of Practice

CHSM 305 Health Services Management:

The Management Cycle

CMHR 523 Human Resources:

Human Resources Management

CVNU 317 Nursing: Health and Social Policy

CVNU 322 Nursing: Computer and Information

Management in Nursing

Lighting Design

This multidisciplinary certificate is designed to provide students with the broad knowledge base and wide range of skills required as professionals in the lighting industry. Changes are taking place in the lighting industry, largely centred around increased legislative acts limiting energy budgets for new construction, retrofitting and the need for designing buildings which are environmentally responsible and ergonomically sound, and with enhanced vision for health and safety. New information is available, new technologies have been developed, new methodologies exist, and new questions are emerging as the building industry works toward an integration of architecture, engineering and resource management, and the concerns for health and safety are moved to the forefront in design.

The Certificate in Lighting Design is of particular interest to those persons who are seeking to enhance their knowledge and skill in the art and science of lighting design and who are degree graduates of one of either Architecture or Landscape Architecture, Engineering, Interior Design, or Theatre Design and Production.

Graduates of other programs such as Business, Fashion, and Radio and Television Arts, or individuals without degrees, but with a satisfactory level of education and experience in the lighting industry, may also be eligible with the approval of the academic coordinator.

Admission Requirements

Undergraduate degree or mature student status with related professional experience and education is required.

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Course Prerequisites

Successful completion of all stated prerequisites is required for registration in a course. Students who register in a course without successful completion of the prerequisites will be required to withdraw.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The certificate will require the completion of seven courses, with a cumulative grade point average of 2.00 or higher.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Required Courses

- CDID 501 Lighting Design: Lighting Fundamentals
- CDID 502 Lighting Design: Human Factors in Lighting
- CDID 503 Lighting Design: Introduction to Lighting Design
- CDID 504 Lighting Design: Lighting Energy Management
- CDID 550 Lighting Design: Introduction to Daylighting Design
- CDID 551 Lighting Design: Advanced Lighting Design

Electives (select one)

- CDID 552 Lighting Design: Entertainment Lighting Design
- CDID 553 Lighting Design: Lighting Design Practicum
- CDID 554 Lighting Design: Lighting Research Practicum

Macroeconomic Theory and Policy

Macroeconomic theory examines the effect of changes in the price level and in the level of aggregate output, while making the simplifying assumption that relative prices remain the same. This certificate is designed to show students how to use the tools of macroeconomics to analyze issues of economic policy involving money and banking in the domestic and international economy, labour markets, economic development, as well as the economies of East Asia.

For other economics certificates, please visit www.ryerson.ca/ce/economics.

Academic Coordinator: Michael Jolly, mjolly@ryerson.ca.

Admission Requirements

OSSD with six Grade 12 U (including Grade 12 U credits in English and Mathematics) or M credits, or equivalent, or mature student status.

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of six courses, with a cumulative grade point average of 2.00 or higher, is required for the certificate.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Required Courses

- CECN 104 Economics: Introductory Microeconomics
- CECN 204 Economics: Introductory Macroeconomics
- CECN 301 Economics:
 Intermediate Macroeconomics I

Electives (select three)

- CECN 129 Economics: Statistics for Economics I
- CECN 503 Economics: Economic Development
- CECN 506 Economics: Money and Banking
- CECN 600 Economics:
 Intermediate Macroeconomics II
- CECN 605 Economics: Labour Economics
- CECN 606 Economics: International Monetary Economics
- CECN 715 Economics: Advanced Microeconomics
- CECN 802 Economics: The Economies of East Asia
- CECN 815 Economics: Advanced Macroeconomics

Distance Education

The following courses are available in a distance education format.

CECN 104 Economics:

Introductory Microeconomics

CECN 204 Economics:

Introductory Macroeconomics

CECN 506 Economics: Money and Banking

CECN 606 Economics:

International Monetary Economics

Magazine and Web Publishing

Formerly: Magazine Publishing

The Certificate in Magazine and Web Publishing is designed to provide essential knowledge and skills in all aspects of producing a magazine, from writing to editing to ad sales, circulation, and production. Students in the certificate come from various backgrounds:

- those planning a career in the magazine industry, either staff or freelance
- those working at a magazine and looking to sharpen the skills they use in their job and/or broaden their knowledge of the other disciplines within their company
- those thinking of starting up their own magazine Instructors with extensive experience, all of whom currently work in the field, offer professional-level teaching that combines a solid theoretical base with practical training.

Magazines Canada and the Canadian Business Press recognize the high level of quality and professionalism that Ryerson brings to its Magazine and Web Publishing certificate program.

For detailed certificate and program information, please visit www.ryerson.ca/ce/magazine.

Admission Requirements

Undergraduate degree, or mature student status with acceptable professional experience in publishing or a related field is required. You may take individual courses without pursuing the certificate.

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Program Open House

All applicants are encouraged to attend an Open House session, or may contact The Chang School at 416.979.5035 or ce@ryerson.ca.

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of seven 42-hour courses, or the equivalent, with a cumulative grade point average of 2.00 or higher, is required for the certificate.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Required Courses

Courses need not be taken in any particular order.

- CDJN 112 Magazine and Web Publishing: Magazine and Website Publishing
- CDJN 113 Magazine and Web Publishing: Magazine and Website Editing

Electives (five 42-hour courses or equivalent combination of electives totalling 210 hours) 42-Hour Courses

- CDJN 116 Magazine and Web Publishing: Introduction to Magazine Design
- CDJN 117 Magazine and Web Publishing: Writing for Magazines and the Web
- CDJN 118 Magazine and Web Publishing: Advanced Feature Writing
- CDJN 119 Magazine and Web Publishing: Magazine Copy Editing
- CDJN 205 Magazine and Web Publishing: Magazine Production

21-Hour Courses

Students may substitute two of the following 21-hour courses for any of the above 42-hour electives.

- CDJN 120 Magazine and Web Publishing: Magazine Fact-Checking and Research
- CDJN 121 Magazine and Web Publishing: Editing Service Journalism
- CDJN 122 Magazine and Web Publishing: Substantive Editing for Magazines
- CDJN 201 Magazine and Web Publishing: Magazine Advertising Sales
- CDJN 202 Magazine and Web Publishing: Magazine Marketing and Circulation
- CDJN 204 Magazine and Web Publishing: Layout Software for Magazine Editors
- CDJN 206 Magazine and Web Publishing: Creating Website Editorial
- CDJN 208 Magazine and Web Publishing: Ad Sales on the Web

Note to registered certificate program students

Effective Fall 2010, the Certificate in Magazine Publishing has been revised to Magazine and Web Publishing. After this time, graduating students will receive the new certificate name.

Electives (21-Hour Courses)

CDJN 208 added.

CDJN 203 deleted.

Media Writing Fundamentals

Students will receive a thorough overview of all the various forms of writing for the electronic media, including dramatic writing, commercial writing, and writing for factual programs. Practical assignments will be supported by theoretical material that provides fundamental instruction in dramatic theory and marketing theory, and will provide both a context and a critical lens through which students may view their written work.

For detailed certificate and program information, please visit www.ryerson.ca/ce/rta.

Admission Requirements

OSSD with six Grade 12 U or M courses, including OAC English or Grade 12 U English (ENG4U) with a minimum grade of 70 percent or higher, or mature student status is required.

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Admission Application

Students seeking admission to this program are required to complete an application for pre-approval. To obtain an application, click on Forms and Documents, or call 416.979.5035. Completed application forms along with all of the appropriate documentation should be taken to the Open House session. Incomplete applications will not be considered.

Students not wishing to complete the Certificate in Media Writing Fundamentals may take individual courses from the certificate program for general interest and the application process is not necessary.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of seven courses (two required courses plus five electives), with a cumulative grade point average of 2.00 or higher, is required for the certificate. The order in which the required courses are taken should be considered carefully so as to meet the prerequisites for the desired elective courses.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/ Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Required Courses

The order in which the required courses are taken should be considered carefully so as to meet the prerequisites for the desired elective courses.

- CBDC 102 Broadcasting and Media Production: Media Writing I - Audio and Digital Media
- CBDC 202 Broadcasting and Media Production: Media Writing II - TV Studio and EFP

Electives (select five)

- CBDC 941 Broadcasting and Media Production: Dramatic Writing
- CBDC 942 Broadcasting and Media Production: Commercial Writing
- CBDC 943 Broadcasting and Media Production: Comedic Writing
- CBDC 944 Broadcasting and Media Production: Writing for Animation
- CBDC 945 Broadcasting and Media Production: Writing for Factual Programs
- CBDC 946 Broadcasting and Media Production: Interactive Writing
- CDMP 125 Film Studies: Fiction Screenwriting
- CDMP 126 Film Studies: Non-fiction Screenwriting

Note to registered certificate program students

The following changes thus reduce the number of courses for certificate requirement from eight to seven.

Required Courses

CBDC 940 deleted.

Electives

CDRT 204 deleted.

CDMP 125 and CDMP 126 added.

Mental Health and Addictions

This certificate program provides a comprehensive curriculum in mental health and addictions to individuals requiring knowledge in the area in dealing with employees, clients, family members, and friends through their places of employment, volunteer activities, or personal situations. Building on a foundation of psychological concepts, the curriculum comprising degree-level courses acquaints students with the various perspectives describing and understanding mental health, mental health disorders and addictions, and interventions, including assessment, treatment, and self-help strategies within individual, group, family, and community contexts.

Admission Requirements

OSSD with six Grade 12 U or M credits, or equivalent, or three years of experience in business, community service, or industry are required.

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of 10 course credits, with a cumulative grade point average of 2.00 or higher, is required for the certificate.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/ Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Required Courses

- CPSY 102 Psychology:
 Introduction to Psychology I
- CPSY 202 Psychology:
 Introduction to Psychology II
- CPSY 215 Psychology: Psychology of Addictions
- CPSY 325 Psychology: Psychological Disorders

Electives (total of six courses from the following two groups)

Electives – Group A (select at least two)

- CPSY 214 Psychology: Psychopharmacology
- CPSY 324 Psychology: Biological Psychology
- CPSY 335 Psychology: Clinical Psychology
- CPSY 607 Psychology: Drugs and Human Behaviour

Electives - Group B (select two to four)

- COPS 250 Psychology: Independent Study
- CPSY 302 Psychology: Child Development
- CPSY 602 Psychology: Developmental Psychopathology
- CPSY 605 Psychology:
 Psychology of Health and Health Care
- CPSY 621 Psychology: Psychology of Human Sexuality
- CPSY 802 Psychology: Death, Dying, and Bereavement
- CPSY 805 Psychology:
 Adjustment, Stress and Coping
- CPSY 806 Psychology: Behaviour Modification
- CPSY 808 Psychology: Community Psychology

Note to registered certificate program students

This certificate program was revised effective July I, 2009. Students who are formally registered in the certificate prior to July I, 2009, must complete the requirements in effect at the time of registration. Students can take either CPSY 214 or CPSY 607 but not both.

Electives Groups A and B have been amalgamated. Electives Group C becomes Group B. COPS 6o6 was deleted, therefore making it necessary to combine the two elective groups. COPS 250 replaces CPSY 961.

Distance Education

The following course is available in a distance education format.

CPSY 607 Psychology: Drugs and Human Behaviour

Microeconomic Theory and Policy

Microeconomic theory examines the effect of changes in relative prices, while making the simplifying assumption that the overall price level and the level of aggregate output remain constant. This certificate is designed to show students how to use the tools of microeconomics to analyze issues of economic policy involving labour markets, the transportation sector, natural resources, the interaction between environment and economy, international trade, industrial organization, and the public sector.

For other economics certificates, please visit www.ryerson.ca/ce/economics.

Academic Coordinator: Michael Jolly, mjolly@ryerson.ca.

Admission Requirements

OSSD with six Grade 12 U (including Grade 12 U credits in English and Mathematics) or M credits, or equivalent, or mature student status.

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of six courses, with a cumulative grade point average of 2.00 or higher, is required for the certificate.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Required Courses

- CECN 104 Economics: Introductory Microeconomics
- CECN 204 Economics: Introductory Macroeconomics
- CECN 504 Economics: Intermediate Microeconomics I

Electives (select three)

- CECN 129 Economics: Statistics for Economics I
- CECN 321 Economics: Introduction to Law and Economics
- CECN 501 Economics: Industrial Organization
- CECN 502 Economics: Economics of Natural Resources
- CECN 510 Economics: Environmental Economics
- CECN 605 Economics: Labour Economics
- CECN 640 Economics: The Economics of Immigration
- CECN 700 Economics: Intermediate Microeconomics II
- CECN 703 Economics: Public Finance I
- CECN 707 Economics: Economics of International Trade
- CECN 710 Economics: Transportation Economics
- CECN 715 Economics: Advanced Microeconomics
- CECN 803 Economics: Public Finance II

Distance Education

The following courses are available in a distance education format.

CECN 104 Economics: Introductory Microeconomics CECN 204 Economics: Introductory Macroeconomics

Music: Global and Cultural Contexts

The Certificate in Music: Global and Cultural Contexts explores musical creation in all of its rich diversity. Students will learn about the complexities of music from around the globe, from ancient times until the modern age. Through concrete study of the ways in which music reflects and responds to its shifting cultural, social, political, and historical environments, students will hone skills in critical thinking, analysis, and writing. The program will be well-suited to students with broad interest in the study and practice of music for personal enrichment, academic progress, or professional development.

Academic Coordinator: Paul Swoger-Ruston, pruston@ryerson.ca (copying Associate Program Director, Anne-Marie Brinsmead, at a2brinsm@ryerson.ca).

Admission Requirements

OSSD with six Grade 12 U or M credits (including English) with a minimum grade of 70 percent, or equivalent, or mature student status with relevant work experience.

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of six courses (three required courses and three electives), with a cumulative grade point average of 2.00 or higher, is required for the certificate.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Recommended Sequence

Students are advised to take the courses in the following sequence: CMUS 101 and/or CMUS 106; Electives – Group A (one or two selections); and Electives – Group B (three selections).

Required Courses

Students may select one or both of the following courses. If only one course is taken, then two selections must be made from Electives – Group A.

- CMUS 101 Music:
 Intro to World and Early European Music
- CMUS 106 Music: The Architecture of Music

Electives - Group A (select one or two)

- CMUS 105 Music: Voices Without Borders: Global Chorus
- CMUS 211 Music: Music Cultures of the City
 CMUS 401 Music: Music Policion and
- CMUS 401 Music: Music, Religion and Spirituality
- CMUS 501 Music: Traditional Musics of the World

Electives – Group B (select three)

- CMUS 110 Music: Music and Film
- CMUS 201 Music: Introduction to Classical Music
- CMUS 303 Music: Global Guitar
- CMUS 403 Music: Latin American Music
- CMUS 406 Music: Chinese Instrumental Music
- CMUS 505 Music: Popular Music and Culture
- CMUS 506 Music: Chinese Music Studies

Note to registered certificate program students Electives – Group B

CMUS 303 and CMUS 403 added.

Advanced Neuroscience – Stroke Care

This Interprofessional Certificate in Advanced Neuroscience-Stroke Care offers health care providers the opportunity to develop an advanced understanding of evidence-based practices and research across the continuum of neuroscience and stroke client-centred care. Developed by subject matter experts in both the clinical and academic fields, the curriculum ensures industry relevance and recognition. To maximize access for health care professionals, all courses will be delivered through a combination of self-study, online course work, and on-site videoconferencing instruction through the Ontario Telemedicine Network (OTN).

For detailed certificate and program information, please visit www.ryerson.ca/ce/neuroscience-stroke.

Program Manager: Paula Mastrilli, ceneuroscience@ryerson.ca or 416.979.5000, ext. 2061.

Admission Requirements

A baccalaureate degree or equivalent in a health-related field of study and a minimum of one years' related professional experience in neuroscience-stroke care.

If an applicant has experience in neuroscience-stroke care and/or is in the process of completing a baccalaureate degree or equivalent, the program manager will assess the applicant's work experience and academic credentials to determine the applicant's admissibility to the program.

Students who wish to enroll in specific courses on a stand-alone basis may do so with permission of the academic coordinator.

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Admission Interview

Admission interviews will be conducted either in person, by phone, or at a Program Open House. For further information, contact The G. Raymond Chang School of Continuing Education office by email or 416.979.5035.

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Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of six single-term courses or equivalent, with a cumulative grade point average of 2.00 or higher, is required for the certificate.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Required Courses

- CVNS 600 Neuroscience: Critical Appraisal of Evidence
- CVNS 620 Neuroscience: Health Promotion Paradigms
- CVNS 630 Neuroscience: Brain Structures and Cognition
- CVNS 640 Neuroscience: Neuro-Stroke Assessment
- CVNS 650 Neuroscience: Client Stroke Rehabilitation Recovery
- CVNS 660 Neuroscience: Leadership in Stroke Care

Nonprofit and Voluntary Sector Management

Note: All of the courses in this program are available by distance education.

Ryerson has created this distinctive, interdisciplinary certificate program in response to a growing demand for education that focuses on the specialized needs of the sector.

This program is the first undergraduate university certificate program in nonprofit sector management in Canada. It is affiliated with Ryerson's Centre for Voluntary Sector Studies, which provides a dynamic link to the sector through research, consultation, and educational programming. This unique program offers the following:

- an interdisciplinary curriculum pooling knowledge from three academic disciplines: business management, politics and public administration, and social work
- a practical blend of theory and application taught by academics and practitioners
- a wide range of current and relevant courses covering key areas such as marketing, financial management, fundraising, advocacy, strategic planning, program evaluation, organizational management, and organizational change

Courses are available in a variety of formats including distance via the Internet.

Who Will Benefit

- managers, staff, practitioners and volunteers of nonprofit organizations
- those interested in pursuing careers in the nonprofit sector
- those interested in developing partnerships with nonprofit organizations

Centre for Voluntary Sector Studies: Gerda Kaegi, Academic Coordinator, 416.979.5035.

For detailed certificate and program information, please visit **www.ryerson.ca/ce/nonprofit**.

Admission Requirements

OSSD with six Grade 12 U or M credits, or equivalent, or mature student status is required.

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of eight single-term courses (four required courses and four electives), with a cumulative grade point average of 2.00 or higher, is required for the certificate.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Required Courses

- CINP 900 Nonprofit: Intro to the Nonprofit / Voluntary Sector
- CINP 901 Nonprofit: Developing Effective Organizations
- CINP 902 Nonprofit: Program Evaluation
- CINP 920 Nonprofit: Critical Issues

Course Delivery Schedule

	2011/2012			2012/2013			2013/2014			2014/2015			2015/2016		
	F	W	S	F	W	S	F	W	S	F	W	S	F	W	S
Required	Required														
CINP 900		C/D			С	D		C/D			C/D			С	D
CINP 901	C/D			C/D			C/D			C/D			C/D		
CINP 902	Н		D	D	Н		Н	D		Н	D		D	Н	
CINP 920		D			H/D		D			Н		D		D	
Electives															
CINP 910		Н		D			Н		D		Н		D		
CINP 911	С		D		С				D	С				С	
CINP 912	D	С	D	С	D		D	С		D	С		С	D	
CINP 913		D		Н		D		H/D		Н	D				D
CINP 914	D	С		D	С		С	D		D	С		С		D
CINP 915		H/D			Н			Н	D		Н	D	Н	D	
CINP 916	D			С		D		С		С		D		C	D

C = Classroom

D = Distance

H = Hybrid (classroom/Internet combined)

This schedule is subject to revision but can be used as a planning guide.

his schedule is subject to revision but can be used as a painting gr

Electives (select four)

- CINP 910 Nonprofit: Strategic Planning
- CINP 911 Nonprofit: Advocacy and Governmental Relations
- CINP 912 Nonprofit: Marketing for NonProfit Organizations
- CINP 913 Nonprofit: Leading Through Change
- CINP 914 Nonprofit: Issues of Diversity
- CINP 915 Nonprofit: Financial Management
- CINP 916 Nonprofit:
 NGOs and World Governance

Occupational Health and Safety

Note: Many of the courses in this program are available by distance education.

This certificate program in Occupational Health and Safety was developed in cooperation with the Ryerson School of Occupational and Public Health (www.ryerson.ca/sophe). This unique offering is designed especially for those currently involved in the field who wish to expand their knowledge and improve their skills. The program covers a wide range of perspectives, principles, and issues in the occupational health and safety field, and is applicable to all types of industry.

For detailed certificate and program information, please visit www.ryerson.ca/ce/ohs.

Admission Requirements

OSSD with six Grade 12 U or M credits, or equivalent, or mature student status and extensive professional experience.

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of eight courses, with a cumulative grade point average of 2.00 or higher, is required for the certificate.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Required Courses

- CCMN 114 Communication: Short Management Reports
- COHS 208 Occupational Health: Occupational Health and Safety Law
- COHS 508 Occupational Health: Occupational Health
- COHS 608 Occupational Health: Hazard Recognition and Control
- COHS 718 Occupational Health: Systems Management I
- CVOH 217 Occupational Health: Measurement and Analysis
- CVOH 221 Occupational Health: Topics in Occupational Health and Safety

Electives (select one)

- CMHR 405 Human Resources: Organizational Behaviour and Interpersonal Skills
- COHS 477 Occupational Health: Integrated Disability Management
- CPPA 101 Politics and Public Administration: Cdn Public Administration I: Institutions

Note: Many of the courses are offered in an intensive format. See course descriptions for additional information.

Note to registered certificate program students Electives

CPPA 101 replaces CPPA 322.

Distance Education

The following courses are available in a distance education format.

CCMN 114 Communication:

Short Management Reports

COHS 208 Occupational Health:

Occupational Health and Safety Law

COHS 508 Occupational Health:

Occupational Health

COHS 608 Occupational Health:

Hazard Recognition and Control

COHS 718 Occupational Health:

Systems Management I

CVOH 217 Occupational Health:

Measurement and Analysis

CVOH 221 Occupational Health:

Topics in Occupational Health and Safety

CMHR 405 Human Resources:

Organizational Behaviour and Interpersonal Skills

COHS 477 Occupational Health:

Integrated Disability Management

CPPA 322 Politics and Public Administration:

Canadian Public Administration I

Organizational Leadership

Organizational leadership and management skills are critical to success in business, in the voluntary sector, community services, and any profession where you must achieve results through others. The Certificate in Organizational Leadership will help you develop the ability to influence, motivate, and enable others to contribute towards the effectiveness and success of your organization. Upon completion of this certificate, you will be able to apply leadership knowledge and skills to any job, in any sector.

Admission Requirements

OSSD with six Grade 12 U, including Grade 12 U or M credits, or equivalent, or mature student status with relevant work experience.

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of six courses, with a cumulative grade point average of 2.00 or higher, is required for the certificate.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Required Courses

- CMHR 405 Human Resources: Organizational Behaviour and Interpersonal Skills
- CMHR 640 Human Resources: Leadership

Electives (select four)

- CMHR 505 Human Resources: Organizational Behaviour II
- CMHR 650 Human Resources: Management of Change
- CMHR 700 Human Resources: Cross-Cultural Dimensions of Organizational Behaviour
- CMHR 721 Human Resources: Negotiation and Conflict Resolution
- CMHR 741 Human Resources: Managing Interpersonal Dynamics
- CMHR 841 Human Resources: Organization Theory and Design
- CMHR 850 Unassigned placeholder entry: Organization Development

Distance Education

The following courses are available in a distance education format.

CMHR 405 Human Resources: Organizational Behaviour and Interpersonal Skills

CMHR 505 Human Resources: Organizational Behaviour II

Photography Studies

Photography has become an important medium of communication in industry, sales and advertising, government, education, the press, and the arts; consequently, there has been a rise in the demand for properly trained and qualified personnel to work in these fields. This certificate program addresses these needs by offering a basic professional program of study in photography for those who wish to upgrade their present level of expertise, retrain or make a career change, establish their own business, improve opportunities for advancement or job placement in photography-related fields, or prepare for entrance into the degree program at an advanced level

The courses in the certificate program are usually equivalent to one-half or one-quarter of similar courses in the undergraduate degree program. In some cases full credit for an undergraduate degree course may be granted by completing specific certificate courses (see course descriptions). Transfer credit students will not be considered unless they have already taken the Image History, Image Theory, and Visual Studies courses.

Individual Courses

Students not wishing to complete the Certificate in Photography Studies may take individual courses from the certificate program for general interest.

Admission Requirements

OSSD with six Grade 12 U or M credits (including English), with a minimum average of 60 percent, or equivalent, or mature student status with relevant professional experience is required.

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Advanced Standing

Mature students may be eligible on the basis of work experience in a relevant field. Applicants possessing higher qualifications will be considered for advanced standing on individual merits.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of eight single-term courses, with a cumulative grade point average of 2.00 or higher, is required for the certificate.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/ Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Equipment/Facilities Use

Please note that equipment and facilities use outside of class time will not be provided.

Required Courses

Choose the Traditional or Digital Stream.

Traditional Stream

- CDFP 320 Photography: Techniques of Photography I
- CDFP 321 Photography: Techniques of Photography II
- CDFP 391 Photography: History of Photography I

Digital Stream

- CDFP 383 Photography: Digital Capture I
- CDFP 384 Photography: Digital Capture II
- CDFP 391 Photography: History of Photography I

Electives (select five)

- CDFP 322 Photography: Art Direction/Design Techniques
- CDFP 332 Photography: Digital Printing
- CDFP 381 Photography: Advanced Fashion Photography
- CDFP 382 Photography: Advanced Portrait Photography
- CDFP 385 Photography: Digital Tools I
- CDFP 386 Photography: Digital Tools II
- CDFP 389 Photography: Commercial Product Photography I
- CDFP 390 Photography:
 Commercial Product Photography II
- CDFP 392 Photography: Approaches to Documentary Photography
- CDFP 398 Photography: History of Photography II
- CDFP 403 Photography: Creative Wedding Photography
- CDFP 404 Photography: Photography Assignments
- CDFP 405 Photography: Architectural Photography
- CFPN 532 Photography:
 Advanced Studio Lighting
- CFPN 536 Photography: Media Business Studies
- CFPN 539 Photography: The Human Figure
- CFPN 543 Photography: Historical Processes Workshops

Note to registered certificate program students

This certificate has been revised effective July I, 2010. Students who formally registered in the certificate prior to July I, 2010, must complete the program requirements in effect at the time they registered.

Electives

CDFP 397 and CNPF 549 deleted.

CDFP 403, CDFP 404, CDFP 405, CFPN 539, and CFPN 543 added.

Note: Elective group has been reduced to five courses, thereby reducing the number of courses for certificate requirement the certificate from ten to eight.

Physical Activity: Assessment and Promotion

This program provides dietetic and nutrition practitioners with a unique interdisciplinary perspective on human movement. It offers knowledge and tools necessary to approach physical activity using the population health framework. Topics include exercise physiology, physical assessment, social aspects of health and activity, health related fitness outcomes and body weight management, healthy development and aging, and methodology to create active environments and lifestyles.

For detailed certificate and program information, please visit www.ryerson.ca/ce/PracticeinMotion.

Admission Requirements

This is an advanced certificate. Eligible applicants must have completed a Bachelor's degree in Nutrition and Food (or equivalent) or have clear standing in an upper year of such a degree program and submit an Application for Admission to the academic coordinator for approval (an interview might be required).

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Please contact Diane Candiotto, Academic Coordinator prior to enrolling in a course.

Admission Application

Students seeking admission to this program are required to submit an application for pre-approval to the academic coordinator for the Certificate in Physical Activity: Assessment and Promotion. To obtain an application, visit the Forms and Documents section. The completed application, together with transcripts, may be presented to the academic coordinator during the Open House, or mailed to the address on the form.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of six courses, with a cumulative grade point average of 2.00 or higher, is required for the certificate. It is recommended that the following courses are completed first: CFNA 100, CPLN 303, CFNA 201, and CFNA 300.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Required Courses

- CFNA 100 Physical Activity: Health and Physical Activity
- CFNA 201 Physical Activity:
 Lifestyle and Fitness Assessment
- CFNA 202 Physical Activity: Physical Activity and the Environment
- CFNA 300 Physical Activity: Nutrition and Physical Activity
- CFNA 301 Physical Activity: Exercise Intervention
- CPLN 303 Physical Activity: Exercise Science and Physiology

Note to registered certificate program students

This program has been revised effective July I, 2009. Students who formally registered in the certificate prior to July I, 2009, must complete the program requirements in effect at the time they registered.

Required Courses

CFNA 101 deleted. CFNA 100 replaces CVPA 100. CFNA 201 replaces CVPA 201. CFNA 202 replaces CVPA 202. CFNA 301 replaces CVPA 301.

Distance Education

The following courses are available in a distance education format.

CFNA 300 Physical Activity: Nutrition and Physical Activity

Proficiency in French

This certificate program is designed to provide proficiency in oral and written French. The program offers opportunities to increase professional qualifications, prepare for travel, and become a more informed citizen in a bilingual nation. Ten levels of language courses, along with a range of advanced and specialized courses, are offered.

Admission Requirements

Completion of Introductory French I (CFRE 101) with a minimum grade of C+, or admission by placement assessment and interview is required. Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of six single-term credit courses, with a cumulative grade point average of 2.00 or higher, is required for the certificate.

Advanced Placement

If the student completes four courses at a level higher than CFRE 401, the successful completion of four single-term credit courses is required for the certificate. All four courses must be at the advanced level (CFRE 501 or higher).

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/ Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Required Courses

(see Advanced Placement above)

- CFRE 201 French: Introductory French II
- CFRE 301 French: Intermediate French I
- CFRE 401 French: Intermediate French II
- CFRE 501 French: Speaking and Writing French I
- CFRE 601 French: Speaking and Writing French II

Advanced Level Electives (select one)

- CFRE 402 French:
 - French Conversation and Pronunciation
- CFRE 502 French: Advanced Business French I
- CFRE 505 French: Language and Culture I
- CFRE 507 French: English-French Translation I
- CFRE 508 French: Intro to 20th C French Literature I
- CFRE 509 French: Franco-Canadian Literature I
- CFRE 510 French:
- Advanced Grammar and Writing I
- CFRE 515 French:
- Introduction to Business French
- CFRE 602 French:
- Advanced Business French II
- CFRE 605 French: Language and Culture II
- CFRE 607 French:
- English-French Translation II
 CFRE 608 French:
- Intro to 20th C French Literature II
- CFRE 609 French: Franco-Canadian Literature II
- CFRE 610 French:
- Advanced Grammar and Writing II
- CFRE 701 French: French for Today I
- CFRE 704 French:
- Intro to Franco-Canadian Culture I
 CFRE 707 French:
- Introduction to French-English Translation
- CFRE 801 French: French for Today II
- CFRE 803 French:
- French Theatre: 20th C and Contemporary
- CFRE 804 French: Intro to Franco-Canadian Culture II

Note to registered certificate program students

This certificate has been revised effective July 1, 2006. Students who formally registered in the certificate prior to July 1, 2006, must complete the program requirements in effect at the time they registered. For further information, please contact the program assistant for Arts at 416.979.5000, ext 5311.

Required Courses

CFRE 101 deleted.

CFRE 101 is now an Admission Requirement. **Electives**

CFRE 402, CFRE 508, CFRE 509, CFRE 515, CFRE 608, CFRE 609, and CFRE 803 added.

Proficiency in Spanish

This certificate is designed to provide proficiency in oral and written Spanish. It allows students the opportunity to upgrade their professional qualifications and to prepare for business or educational travel in the Spanish speaking world.

Admission Requirements

Completion of Introductory Spanish I (CSPN 101) with a minimum grade of C+, or admission by placement assessment and interview.

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of six single-term courses, with a cumulative grade point average of 2.00 or higher, is required for the certificate.

Advanced Placement

If the student completes four courses at a level higher than CSPN 40I, the successful completion of four single-term courses is required for the certificate. All four courses must be at an advanced level (CSPN 50I or higher).

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Required Courses

(see Advanced Placement above)

- CSPN 201 Spanish: Introductory Spanish II
- CSPN 301 Spanish: Intermediate Spanish I
- CSPN 401 Spanish: Intermediate Spanish II
- CSPN 501 Spanish: Advanced Spanish I
- CSPN 601 Spanish: Advanced Spanish II

Electives (select one)

- CSPN 515 Spanish:
- Introduction to Business Spanish
- CSPN 702 Spanish: Advanced Business Spanish
- CSPN 704 Spanish:
- Introduction to Latin American Culture I
- CSPN 708 Spanish: Contemporary Spanish Fiction
- CSPN 710 Spanish:
 Spanish of Spain and Latin America
- CSPN 804 Spanish: Introduction to Latin American Culture II
- CSPN 810 Spanish: Cultural Context of Writing

Note to registered certificate program students Electives

CSPN 515 and CSPN 702 added.

Program and Portfolio Management

Globalization has caused the market to become more competitive and organizations to become more complex. Both of these factors have created a demand for effective project, program, and portfolio management. This has been heightened by increased pressures presented by the recent economic downturn.

The goal of the Certificate in Program and Portfolio Management is to equip individuals who possess project management experience with the knowledge and skills required to successfully manage programs and portfolios. Inextricably partnered with this goal is that of providing reputable, university-level education which elevates the competency and relative desirability of certificate graduates in the field of project management.

For detailed certificate and program information, please visit www.ryerson.ca/ce/ppm.

Admission Requirements

This is an advanced certificate. Eligible applicants must have completed an undergraduate degree and at least six years relevant professional experience. In addition, all applicants must have one of the following: the Ryerson Certificate in Project Management (or an equivalent program) or current standing as a Project Management Professional (PMP) by the Project Management Institute (PMI) (or an equivalent accreditation).

Note: The Program Director may waive the admission requirements if a prospective student has either exceptional work experience or educational qualifications. To see if you qualify, please contact the Program Director at peter.monkhouse@ryerson.ca or attend an Open House session.

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of six credits (four required courses and six to eight electives (or 168 course hours)), with a cumulative grade point average of 2.00 or higher, is required for the certificate.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/ Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Required Courses

- CKPP IIO Program and Portfolio Management:
 Overview of Program Management
- CKPP 120 Program and Portfolio Management:
 Overview of Portfolio Management
- CKPP 130 Program and Portfolio Management: Program and Portfolio Governance
- CKPP 140 Program and Portfolio Management: Organizational Strategy Through Projects

Electives (select 168 hours)

21-Hour Courses

- CKPP 210 Program and Portfolio Management: Financial Measurements for Success
- CKPP 220 Program and Portfolio Management: Managing Programs and Projects Virtually
- CKPP 230 Program and Portfolio Management: Enterprise Risk Management
- CKPP 240 Program and Portfolio Management: Advanced Leadership Skills
- CKPP 250 Program and Portfolio Management: Leading Organizational Change
- CKPP 260 Program and Portfolio Management: Creating Balanced Portfolios
- CKPP 270 Program and Portfolio Management: Crisis Management and Program Recovery
- CKPP 280 Program and Portfolio Management: Global Program Management

42-Hour Courses

- CKPP 310: Program and Portfolio Management Research
- CKPP 320: Program and Portfolio Management Practicum

Note to registered certificate program students Electives (21-Hour Courses)
CKPP 280 added.

Project Management

Note: Many of the courses in this program are available by distance education.

This certificate program in Project Management provides adult learners with an opportunity to acquire a level of knowledge and expertise that will permit them to contribute effectively to the management and the control of costs within any project environment. The program was developed in cooperation with the Project Management Institute, Southern Ontario Chapter.

For detailed certificate and program information, please visit www.ryerson.ca/ce/pm.

Certificate Specializations

- · Project Management (General)
- Architecture, Engineering, and Construction (AEC)
- · Business and Information Management
- · Community and Health Services Management

Admission Requirements

OSSD with six Grade 12 U or M credits, or equivalent is required; persons lacking some of these requirements will be considered on an individual basis taking into account work-related experience and maturity.

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of eight single-term courses, earned in one of the following ways:

- five required core courses, two stream-specific courses, and one elective
- five required core courses and three courses from the general stream

Students must achieve a cumulative grade point average of 2.00 or higher to graduate.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Recommended Sequence

Students are advised to take the courses in the following sequence: CKPM 202 or CITM 750, CKPM 203, CKPM 211, CKPM 212, CKPM 209. These courses are scheduled during the Fall and Winter terms.

Required Courses

Core Program, Introductory Required Course

Note: Students must choose either CKPM 202 or CITM 750. Students who plan to pursue the ITM degree should take CITM 750, as CKPM 202 is not a degree credit and cannot be used towards the ITM degree.

- CITM 750 Business Technology Management: IT Project Management
- CKPM 202 Project Management: Fundamentals of Project Management

Core Program, Required Courses

- CKPM 203 Project Management: Planning and Scheduling
- CKPM 209 Project Management:
 Project Risk and Quality Management
- CKPM 211 Project Management: Leadership in Project Management
- CKPM 212 Project Management:
 Project Cost and Procurement Management

Select one option below:

Option 1: Project Management General Stream, Required Courses

- CCMN 114 Communication: Short Management Reports
- CKPM 207 Project Management: Project Management Systems
- CMHR 405 Human Resources:
 Organizational Behaviour and Interpersonal Skills

Option 2: Architecture, Engineering, and Construction Stream, Required Courses

- CKPM 213 Project Management: Management of Projects in the AEC
- CKPM 214 Project Management: Project Development and Control

Option 3: Business and Information Management Stream, Required Courses

- CITM 305 Business Technology Management: Systems Analysis and Design
- CITM 410 Business Technology Management: Business Process Design

Option 4: Community and Health Services Management Stream, Required Courses (select two)

- CHSM 301 Health Services Management: The Healthcare Systems
- CHSM 305 Health Services Management: The Management Cycle
- CVLT 102 Long Term Care: Principles of Long Term Care Service Delivery

Note: Unlike the industry specific streams, the general stream does not have a free elective.

Electives – All Streams (select one or 42 hours) 21-Hour Courses

- CKPP IIO Program and Portfolio Management:
 Overview of Program Management
- CKPP 120 Program and Portfolio Management:
 Overview of Portfolio Management

42-Hour Courses

- CCMN 114 Communication: Short Management Reports
- CHSM 306 Health Services Management: Management Leadership and Decision-Making
- CINT 905 Interdisciplinary Studies: Conflict Resolution in Community Services
- CITM 505 Business Technology Management: Managing Information Systems
- CKPM 207 Project Management: Project Management Systems
- CKPM 215 Project Management: Topics in Project Management
- CKPM 216 Project Management:
 Project Management Internship
- CMHR 405 Human Resources:
 Organizational Behaviour and Interpersonal Skills
- CVLT 401 Long Term Care: Project
 Management in Long Term Care Administration

Note to registered certificate program students

This certificate has been revised effective July 1, 2006. Students who formally registered in the certificate prior to July 1, 2006, must complete the program requirements in effect at the time they registered. For further information, please contact The Chang School at 416.979.5035 or ce@ryerson.ca.

CITM 724 and CPLE 895 deleted. CKPP 110, CKPP 120, CKPM 215, and CKPM 216 added.

Distance Education

The following courses are available in a distance education format.

CKPM 203 Project Management:

Planning and Scheduling

CKPM 209 Project Management:

Project Risk and Quality Management

CKPM 211 Project Management:

Leadership in Project Management CKPM 212 Project Management:

Project Cost and Procurement Management

CCMN 114 Communication:

Short Management Reports

CMHR 405 Human Resources:

Organizational Behaviour and Interpersonal Skills

CHSM 301 Health Services Management:

The Healthcare Systems

CHSM 305 Health Services Management:

The Management Cycle

CITM 750 Business Technology Management: IT Project Management

CKPM 202 Project Management:

Fundamentals of Project Management

CITM 305 Business Technology Management: Systems Analysis and Design

CINT 905 Interdisciplinary Studies:

Conflict Resolution in Community Services

CITM 505 Business Technology Management:

Managing Information Systems

Psychology

This certificate program will appeal to students who wish to enhance their career opportunities and/or personal interests. The program provides the opportunity to study and understand human behaviour in a wide variety of settings. It is designed to familiarize students with the methods, concepts, theories, and applications of psychology.

Students may choose electives from a variety of areas in psychology or they may choose to specialize. Suggested specializations include the following: psychological principles of growth and development abnormal aspects of human behaviour explanations of personality and its development the study of social behaviour applications of psychology in organizations

Admission Requirements

OSSD with six Grade 12 U or M credits, or equivalent, or three years of experience in business, community service, or industry are required.

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Transfer Credits

Up to four single-term course credits may be granted on the basis of the successful completion of other Ryerson psychology courses or the completion of psychology courses at other post-secondary institutions meeting Ryerson Faculty of Arts requirements. See Transfer Credits.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of eight course credits, with a cumulative grade point average of 2.00 or higher, is required for the certificate. Three courses are compulsory: a foundation course, a research methodology course, and an independent study course. A foundation course must be taken as the first course. The independent study course may be taken only after the foundation course, the research methodology course, and three other courses chosen from the electives have been completed.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Required Courses

Students may select only one of CPSY 102 or CPSY 105.

- COPS 250 Psychology: Independent Study
- · COPS 601 Psychology: Research Methodology
- CPSY 102 Psychology:
 Introduction to Psychology I
- CPSY 105 Psychology: Perspectives in Psychology

Students planning to enroll in the Independent Study course should contact the Academic Coordinator, Department of Psychology, at 416.979.5000, ext. 6195, in the first week of September or January, to be assigned a faculty advisor from the Department of Psychology.

Electives (select five)

- CPSY 202 Psychology: Introduction to Psychology II
- CPSY 214 Psychology: Psychopharmacology
- CPSY 215 Psychology: Psychology of Addictions
- CPSY 300 Psychology: Psychology and Law
- CPSY 302 Psychology: Child Development
- CPSY 304 Psychology: Psychology of Gender
- CPSY 308 Psychology: Psychology of Thinking
- CPSY 324 Psychology: Biological Psychology
- CPSY 325 Psychology: Psychological Disorders
- CPSY 402 Psychology: Adult Development
- · CPSY 504 Psychology: Social Psychology
- CPSY 505 Psychology: Personality Theory

- CPSY 518 Psychology: Environmental Psychology
- CPSY 602 Psychology: Developmental Psychopathology
- · CPSY 606 Psychology: Abnormal Psychology
- CPSY 607 Psychology: Drugs and Human Behaviour
- CPSY 614 Psychology: Psychology of Sport
- CPSY 620 Psychology: Psychology of Immigration
- CPSY 621 Psychology: Psychology of Human Sexuality
- CPSY 706 Psychology: Models of Personal Growth
- CPSY 707 Psychology: Models of Stress and Adaptation
- CPSY 802 Psychology:
 Death, Dying, and Bereavement
- CPSY 805 Psychology:
 Adjustment, Stress and Coping
- CPSY 806 Psychology: Behaviour Modification
- CPSY 807 Psychology: Psychology of Prejudice
- CPSY 808 Psychology: Community Psychology

Specialization

Students may choose electives from a variety of areas in psychology, or they may choose to specialize to achieve their individual goals. The electives may be grouped as follows:

- Growth and Development:
 CPSY 302, CPSY 402, CPSY 602, CPSY 802
- Abnormal Behaviour:
 CPSY 215, CPSY 325, CPSY 602, CPSY 606,
 CPSY 607, CPSY 805, CPSY 806
- Personality: CPSY 505, CPSY 706, CPSY 805
- Social Behaviour: CPSY 304, CPSY 504, CPSY 518, CPSY 614, CPSY 807, CPSY 808

Note to registered certificate program students Correction

The absence of COPS 601 in the 2006-2007 annual calendar was incorrect. Students require either CPSY 601 or COPS 601 to complete the Certificate in Psychology.

Required Courses

COCR 958 deleted.

COPS 601 replaces CPSY 601.

COPS 250 replaces CPSY 961.

Electives

CPSY 214 and CPSY 518 added.

CPSY 813 deleted.

Distance Education

The following courses are available in a distance education format.

CPSY 300 Psychology: Psychology and Law CPSY 607 Psychology: Drugs and Human Behaviour

Public Administration and Governance – Level 1 (PADP)

Note: Many of the courses in this program are available by distance education.

Students who wish to obtain their Certificate in Public Administration and Governance or the Advanced Certificate in Public Administration and Governance, must apply through the Office of Undergraduate Admissions for admission to the Public Administration and Governance program. Do not use the standard continuing education certificate application. Upon completing these certificates, students may continue their studies to earn a degree in Public Administration and Governance. Please contact the Program Administrator, Department of Politics and Public Administration, 416.979.5057.

The Certificate and Advanced Certificate in Public Administration and Governance are designed for working public sector employees, students aspiring to careers in the public service, and those interested in gaining knowledge about public administration and public policy in Canada.

These certificates will provide students with the following:

- a better understanding of organizations and operations in the public sector
- the attainment of analytic, administrative, communication, and management skills necessary for career development in the public sector and organizations that deal with it
- an awareness of the political forces that shape public administration and policy

These certificates fulfil Levels 1 and 2 of the Public Administration and Governance degree program. Program Information: Department of Politics and Public Administration, 416.979.5057.

Admission Requirements

OSSD with six Grade 12 U or M credits (including English) with a minimum grade of 60 percent, or mature student status is required.

Grade 13 subjects/OSSHGD may be combined/ substituted with OACs/OSSD. Students who present credits from the OSSHGD (Grade 13 stream) or in combination with credits from the OSSD (OAC stream) should ensure that the credits satisfy the requirements.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of eight single-term courses, with a cumulative grade point average of 2.00 or higher, is required. Students working toward a certificate must formally register in the Public Administration and Governance program (see introductory note above).

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/ Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Required Courses

- CPPA 101 Politics and Public Administration: Cdn Public Administration I: Institutions
- CPPA 102 Politics and Public Public Administration: Cdn Public Administration I: Processes
- CPPA 125 Politics and Public Administration: Rights, Equity, and the State

Required Group 1 (select one)

- CPPA 121 Politics and Public Administration: Ontario Politics and Government
- CPPA 122 Politics and Public Administration: Local Politics and Government
- CPPA 124 Politics and Public Administration: Indigenous Politics and Governance

Liberal Studies Elective Group A

(One 1-term lower-level course required)

Liberal Studies courses are indicated by a "LL" for Lower Level and "UL" for Upper Level. Consult the undergraduate calendar for the complete list of Liberal Studies courses, and use the Course Search to search for your course by subject, term, time, or instruction mode.

Professionally Related Elective Group B (Two 1-term courses required from Table I)

Students intending to proceed to further levels of the program should familiarize themselves with prerequisites pertaining to professionally related elective courses at all levels of the program as well as options for obtaining a minor. Consult the undergraduate calendar for a list of courses.

Note: Upon successful completion of Level 1, students may apply for a Certificate in Public Administration and Governance by completing an Application to Graduate with a Certificate, prior to the appropriate application deadlines.

Note to registered certificate program students

This certificate has been revised effective July 1, 2011. Students who formally registered in the certificate prior to July 1, 2011, must complete the program requirements in effect at the time they registered.

Required

CPOL 332 deleted.
CPPA 101 replaces CPPA 322.
CPPA 102 replaces CPPA 422.
CPPA 125 replaces CPOG 315.

Required Group 1

CPPA 121 replaces CPOG 310. CPPA 122 replaces CPOL 122. CPPA 124 replaces CPOG 440.

Distance Education

The following courses are available in a distance education format. Many Liberal Studies and Professionally Related electives are also offered via distance education; please check individual course descriptions.

CPPA 101 Politics and Public Administration: Cdn Public Administration I: Institutions
CPPA 102 Politics and Public Administration: Cdn Public Administration II: Processes
CPPA 125 Politics and Public Administration:
Rights, Equity, and the State
CPPA 122 Politics and Public Administration:
Local Politics and Government

Public Administration and Governance – Level 2 (PADP)

Students who wish to obtain their Certificate in Public Administration and Governance or the Advanced Certificate in Public Administration and Governance, must apply through the Office of Undergraduate Admissions for admission to the Public Administration and Governance program. Do not use the standard continuing education certificate application. Upon completing these certificates, students may continue their studies to earn a degree in Public Administration and Governance. Please contact the Program Administrator, Department of Politics and Public Administration, 416.979.5057.

The Certificate and Advanced Certificate in Public Administration and Governance are designed for working public sector employees, students aspiring to careers in the public service, and those interested in gaining knowledge about public administration and public policy in Canada.

These certificates will provide students with the following:

- a better understanding of organizations and operations in the public sector
- the attainment of analytic, administrative, communication, and management skills necessary for career development in the public sector and organizations that deal with it
- an awareness of the political forces that shape public administration and policy

These certificates fulfil Levels 1 and 2 of the Public Administration and Governance degree program. Program Information: Department of Politics and Public Administration, 416.979.5057.

Admission Requirements

Successful completion of the Certificate in Public Administration and Governance – Level 1. Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of eight single-term courses, with a cumulative grade point average of 2.00 or higher, is required. Students working toward a certificate must formally register in the Public Administration and Governance program (see introductory note).

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Required Courses

- CPPA 2II Politics and Public Administration: Public Policy
- CPPA 235 Politics and Public Administration: Theories of the State
- CPPA 319 Politics and Public Administration Politics of Work and Labour
- CPPA333 Politics and Public Administration Research Methods in Public Administration

Liberal Studies Elective Group A

(One 1-term lower-level course required)

Liberal Studies courses are indicated by a "LL" for Lower Level and "UL" for Upper Level. Consult the undergraduate calendar for the complete list of Liberal Studies courses, and use the Course Search to search for your course by subject, term, time, or instruction mode.

Professionally Related Elective Group B (1 course required)

- CECN 104 Economics: Introductory Microeconomics
- CECN 204 Economics: Introductory Macroeconomics

Professionally Related Elective Group C (Two 1-term courses required)

Please refer to the Undergraduate Calendar, Professionally Related Electives Table I (found at www.ryerson.ca/calendar) for a complete list of appropriate courses.

Students intending to proceed to Level 3 of the program should familiarize themselves with prerequisites pertaining to professionally related elective courses at all levels of the program as well as options for obtaining a minor.

Note: Upon successful completion of Level 2, students may apply for an Advanced Certificate in Public Administration and Governance by completing an Application to Graduate with a Certificate, prior to the appropriate application deadlines.

Students who have successfully completed the requirements for the Certificate and Advanced Certificate are eligible to continue to the degree level. For more information, contact the Department of Politics and Public Administration, 416.979.5057.

Note to registered certificate program students

This certificate has been revised effective July 1, 2011. Students who formally registered in the certificate prior to July 1, 2011, must complete the program requirements in effect at the time they registered.

Required

- CPPA 211 replaces CPPA 623.
- CPPA 235 replaces CPPA 525.
- CPPA 319 replaces CPOG 319.
- CPPA 333 replaces CPOG 230.

Distance Education

The following courses are available in a distance education format. Many Liberal Studies and Professionally Related electives are also offered via distance education; please check individual course descriptions.

CECN 104 Economics: Introductory

Microeconomics

CECN 204 Economics: Introductory

Macroeconomics

Public Administration and Leadership

This program is designed for individuals who have already completed a degree and who wish to deepen their understanding of the key aspects of public sector management. The curriculum is focused on key areas of policy development, public sector finance, collaborative governance, intergovernmental affairs, program evaluation, e-government, and administrative law. A special capstone course focuses on the nature and style of leadership in the public sector.

Admission Requirements

Eligible applicants must have completed an undergraduate degree in any field and submit an Application for Admission to the academic coordinator for approval (an interview might be required). Applicants who do not have a background in politics or public administration and/or no experience in the public sector are encouraged to successfully complete COPA 103 prior to admission in the certificate.

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Admission Application

Students seeking admission to this program are required to submit an application for pre-approval to the academic coordinator for the Certificate in Public Administration and Leadership. To obtain an application, visit the Forms and Documents section. The completed application, together with transcripts, may be presented to the academic coordinator during the Open House, or mailed to the address on the form.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of six courses (three required courses and three electives), with a cumulative grade point average of 2.00 or higher, is required for the certificate.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Required Courses

- COPA 501 Politics and Public Administration: Public Sector Leadership
- CPPA 211 Politics and Public Administration: Public Policy
- CPPA 404 Politics and Public Administration: Issues in Politics and Public Administration

Electives (select three)

- CPPA 301 Politics and Public Administration: Administrative Law
- CPPA 303 Politics and Public Administration: Financial Management
- CPPA 335 Politics and Public Administration: Theories of Bureaucracy
- CPPA 401 Politics and Public Administration: Collaborative Governance
- CPPA 402 Politics and Public Administration: Program Planning and Evaluation
- CPPA 403 Politics: e-Government
- CPPA 414 Politics and Public Administration: Comparative Public Policy
- CPPA 425 Politics and Public Administration: Intergovernmental Relations

PUBLIC RELATIONS

Note to registered certificate program students

This certificate has been revised effective July 1, 2011. Students who formally registered in the certificate prior to July 1, 2011, must complete the program requirements in effect at the time they registered.

Required

- CPPA 211 replaces CPPA 623.
- CPPA 404 replaces CPPA 604.

Electives

- CPPA 403 and CPPA 414 added.
- CPPA 301 replaces CPPA 629.
- CPPA 303 replaces CPPA 600.
- CPPA 335 replaces CPPA 624.
- CPPA 401 replaces CPPA 601.
- CPPA 402 replaces CPPA 602.
- CPPA 425 replaces CPPA 650.

Distance Education

The following courses are available in a distance education format.

CPPA 301 Politics and Public Administration: Administrative Law

COPA 103 Politics and Public Administration: Public Administration in Canada

Public Relations

Note: Many of the courses in this program are available by distance education.

If a challenging career consulting with professional businesses, community organizations, or government agencies sounds appealing, then public relations may be for you. Public relations practitioners work with a variety of leaders and other professionals to protect organizational reputation; manage issues and crises; conduct media relations; develop internal and external communication programs; develop and manage communication budgets; and write supporting communication materials such as plans, reports, news releases, business presentations, newsletters, website content, and much more.

Recognized by the Canadian Public Relations Society (CPRS) and the International Association of Business Communicators (IABC), the Certificate in Public Relations provides a curriculum that will hone your practical, analytical, and theoretical skills to prepare you for a career in public relations.

Admission Requirements

Because of increasingly stringent hiring practices and trends in the public relations field, students must have an undergraduate degree or three-year community college diploma; mature students must have, at least, a high school diploma and four years of progressive work experience in public relations practice, or in a business, professional, or technical

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Course Prerequisites

Successful completion of all stated prerequisites is required for registration in a course. Students who register in a course without successful completion of the prerequisites will be required to withdraw.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of 42-hour courses or the equivalent courses, with a cumulative grade point average of 2.00 or higher, is required for the certificate.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/ Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Recommended Sequence

CDPR 201

CDRP III

CDPR 104

CDPR 106

CDPR 113

CDPR 114

CDPR 105 CDPR 107

Required Courses

- CDPR 107 Public Relations: Public Relations Project
- CDPR III Public Relations: Writing for Public Relations
- CDPR 201 Public Relations: Public Relations Principles I

Electives (five 42-hour courses or equivalent combination of electives totalling 210 hours) 42-Hour Courses

- CDPR 104 Public Relations: Planning Programming and Budgeting
- CDPR 105 Public Relations: Research and Program Evaluation
- CDPR 106 Public Relations: Media Relations
- CDPR 113 Public Relations: **Internal Communications Management**
- CDPR 114 Public Relations: Reputation Management

21-Hour Courses

Students may substitute two of the following 21-hour courses for any of the above 42-hour electives.

- · CDPR 101 Public Relations: Social Media
- CDPR 102 Public Relations: Business Presentations
- CDPR 103 Public Relations: Advanced PR Writing

Note to registered certificate program students

Effective Fall 2011, the Certificate in Public Relations has been revised. Students who were formally registered in the certificate prior to July 1, 2011, must complete the requirements in effect at the time of their registration.

Required

CDPR 104, CDPR 105, CDPR 106, CDPR 113, and CDPR 114 are now 42-Hour Electives.

Electives

Elective groups added; students must complete five 42-hour electives or equivalent combination of electives totaling 210 hours.

CDPR 101, CDPR 102, and CDPR 103 added as 21-Hour Electives.

Distance Education

The following courses are available in a distance education format.

CDPR 104 Public Relations:

Planning Programming and Budgeting

CDPR 105 Public Relations: Research and Program Evaluation

CDPR 106 Public Relations: Media Relations

CDPR 107 Public Relations:

Public Relations Project

CDPR III Public Relations:

Writing for Public Relations

CDPR 113 Public Relations:

Internal Communications Management

CDPR 114 Public Relations:

Reputation Management

CDPR 201 Public Relations:

Public Relations Principles I

Publishing

Note: Many of the courses in this program are available by distance education.

This program teaches the skills necessary to publish books successfully. The program will be of interest to the following:

- · those who want to enter the publishing industry
- those who are employed in the publishing industry or in areas where publishing skills are required
- those who are working as freelancers in publishing-related fields
- those who wish to upgrade their credentials with a view to career change

For detailed certificate and program information, please visit www.ryerson.ca/ce/publishing.

Instructors

Our instructors are respected industry experts. They all work in publishing and bring up-to-date, applied knowledge to every course. Visit www.ryerson.ca/ce/publishinginstructors for current instructor biographies.

Awards

Students registered in the certificate program may apply for the program's awards and bursary:

- · Marsh Jeanneret Memorial Award
- · Pearson Canada Award
- · Stephen J. Mills Mentorship Award
- Wallace A. Matheson Award for Creativity and Innovation in Educational Publishing
- Rosemary Shipton Award for Excellence in Book Editing

Visit www.ryerson.ca/ce/publishingawards for more details.

Internships

We have an extensive network of industry partnerships that provide direct links between classroom experience and a career. Visit www.ryerson.ca/ce/publishinginternships to see the companies that may be offering industry internships to students in the program.

Admission Requirements

Undergraduate degree, or mature student status with related professional experience and education, is required.

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Notice to Students

Correct use of the English language is essential in the publishing industry. It is therefore an element in the evaluation and grading of assignments.

Students with no background in publishing are strongly recommended to begin by taking either overview course (CDPB 100 or CDPB 200) CDPB 102; CDPB 105; or CDPB 110; and may wish to consider the non-certificate course CDPB 400. Students with full-time positions are advised to register in no more than two credits per term. Specialized half-credit courses require some knowledge of subject or industry. In general, comfort with computers and a knowledge of appropriate software are an asset.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of eight 42-hour courses or the equivalent, with a cumulative grade point average of 2.00 or higher, is required for the certificate.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/ Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Required Courses

- CDPB 100 Publishing: Publishing Overview: Trade
- CDPB 200 Publishing: Publishing Overview: Education

Electives (six 42-hour courses or equivalent 21-hour courses required)

42-Hour Courses

- CDPB 101 Publishing: The Business of Book Publishing
- CDPB 102 Publishing: Copy Editing for Books, Journals, and Reports
- CDPB 103 Publishing: Production for Books, Journals, and Reports
- CDPB 104 Publishing: Introduction to Book Design
- CDPB 105 Publishing:
 Sales and Marketing for Book Publishers
- CDPB IIO Publishing: Publicity for Book Publishers
 CDPB 201 Publishing:
- Literary Rights Management
- CDPB 202 Publishing: Substantive and Stylistic Editing
- CDPB 210 Publishing: Publishing in Transition
- CDPB 802 Publishing: Publishing in the Electronic Age

21-Hour Courses

Students may substitute any two of the following 21-hour courses for any one of the above 42-hour electives.

- CDPB 301 Publishing: Publishing for Children
- CDPB 302 Publishing: Government Reports
- CDPB 304 Publishing: Scholarly and Reference Publishing
- CDPB 306 Publishing: Trade Books: Fiction
- CDPB 309 Publishing: Editing Books for Children and Teens
- CDPB 310 Publishing:
 Proofreading for Books, Journals, and Reports
- CDPB 311 Publishing: Indexing for Books, Journals, and Reports

Note to registered certificate program students Electives (42-Hour Courses)
CDPB 201 and CDPB 210 added.

Distance Education

The following courses are available in a distance education format.

CDPB 100 Publishing:

Publishing Overview: Trade

CDPB 200 Publishing:

Publishing Overview: Education

CDPB 301 Publishing: Publishing for Children

CDPB 302 Publishing: Government Reports

CDPB 304 Publishing:

Scholarly and Reference Publishing

CDPB 306 Publishing: Trade Books: Fiction

CDPB 310 Publishing:

Proofreading for Books, Journals, and Reports

CDPB 101 Publishing:

The Business of Book Publishing

CDPB 102 Publishing:

Copy Editing for Books, Journals, and Reports

CDPB 103 Publishing:

Production for Books, Journals, and Reports

CDPB 104 Publishing:

Introduction to Book Design

CDPB 105 Publishing:

Sales and Marketing for Book Publishers

CDPB 202 Publishing:

Substantive and Stylistic Editing

CDPB 802 Publishing:

Publishing in the Electronic Age

Quantitative Economics

Quantitative skills are valued highly by many employers. This certificate will equip students with the theoretical and quantitative skills that are required by those working as applied economists.

For other economics certificates, please visit www.ryerson.ca/ce/economics.

Academic Coordinator: Michael Jolly, mjolly@ryerson.ca.

Admission Requirements

OSSD with six Grade 12 U (including Grade 12 U credits in English and Mathematics) or M credits, or equivalent, or mature student status.

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of 10 courses, with a cumulative grade point average of 2.00 or higher, is required for the certificate.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Required Courses

- CECN 104 Economics: Introductory Microeconomics
- CECN 129 Economics: Statistics for Economics I
- CECN 204 Economics:
- Introductory Macroeconomics
- CECN 230 Economics:

 Mathematics for Economics
- Mathematics for Economics
 CECN 301 Economics:
- Intermediate Macroeconomics I
- CECN 329 Economics: Statistics for Economics II
- CECN 627 Economics: Econometrics I
- CMTH 189 Mathematics: Introduction to Mathematics for Economics

Electives (select two)

- CECN 504 Economics: Intermediate Microeconomics I
- CECN 600 Economics:
 Intermediate Macroeconomics II
- CECN 605 Economics: Labour Economics
- CECN 700 Economics: Intermediate Microeconomics II
- CECN 702 Economics: Econometrics II

Note to registered certificate program students Required Courses

• CMTH 240 deleted.

Distance Education

The following courses are available in a distance education format.

CECN 104 Economics: Introductory Microeconomics CECN 204 Economics: Introductory Macroeconomics

Residential Care for Children and Youth

Important Note: The Certificate in Residential Care for Children and Youth is currently under review and will not be accepting new registrants at this time. For further information, please contact the Community Services area at 416.979.5035. Registered certificate program students should contact the Academic Coordinator, Sheldon Reinsilber at sreinsil@ryerson.ca or 416.979.5000, ext. 4594, for guidance on how to complete their program requirements.

Admission Requirements

OSSD with six Grade 12 U or M credits, or equivalent, or mature student status is required.

Registrants must be employed in a residential care facility or have permission of the academic coordinator.

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of six courses, with a cumulative grade point average of 2.00 or higher, is required for the certificate. Up to three course credits may be granted on the basis of courses successfully completed at other post-secondary institutions.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/ Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Required Courses

- CVCY 101 Residential Care for Children and Youth: Communications in Residential Care
- CVCY 102 Residential Care for Children and Youth: Human Growth and Development
- CVCY 103 Residential Care for Children and Youth: Principles of Group Care
- CVCY 104 Residential Care for Children and Youth: Residential Care Techniques
- CVCY 105 Residential Care for Children and Youth: Health, Ethics and Professionalism
- CVCY 200 Residential Care for Children and Youth: Reflective Practice Seminar

Distance Education

The following courses are available in a distance education format.

CVCY 101 Residential Care for Children and Youth: Communications in Residential Care CVCY 103 Residential Care for Children and Youth: Principles of Group Care CVCY 104 Residential Care for Children and

Youth: Residential Care Techniques CVCY 105 Residential Care for Children and

Youth: Health, Ethics and Professionalism

Retail Management

Note: Many of the courses in this program are available by distance education.

This certificate is designed for students seeking or currently employed in retail, the largest employment sector in Canada. The program will focus on fundamental retail topics and provides students with the ability to choose electives based on broad interests or specific areas such as buying, operations, or management.

Admission Requirements

OSSD with six Grade 12 U or M credits, or equivalent, or mature student status, and a minimum of one years' related professional experience in the retail industry is required.

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of six courses (two required courses and four electives), with a cumulative grade point average of 2.00 or higher, is required for the certificate.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program.

In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Required Courses

- CRMG 200 Retail Management: Introduction to Retail Management
- CRMG 302 Retail Management: Retail Consumer Insight

Electives (select four)

- CENT 500 Entrepreneurship: New Venture Startup
- CGMS 200 Global Management: Introduction to Global Management
- CMHR 405 Human Resources: Organizational Behaviour and Interpersonal Skills
- CMHR 523 Human Resources: Human Resources Management
- CMKT 100 Marketing: Principles of Marketing
- CQMS 102 Quantitative Methods: Business Statistics I
- CRMG 301 Retail Management: Retail Operations: Processes and Value Chn
- CRMG 303 Retail Management: Service Quality Management
- CRMG 400 Retail Management: Buying Process I
- CRMG 434 Retail Management: Intro to Logistics and Supply Chain Mgmt
- CRMG 452 Retail Management: Visual Merchandising and Space Planning
- CRMG 902 Retail Management: Franchising
- CRMG 907 Retail Management: Relationship Marketing
- CRMG 909 Retail Management: Advanced Buying Process II
- CRMG 910 Retail Management: Multi-Channel Retailing
- CRMG 911 Unassigned placeholder entry: Retail Sales Management
- CRMG 916 Retail Management: Channel Management
- CRMG 919 Retail Management: Applied Demand Forecasting
- CRMG 925 Retail Management: Optimizing Retail Service Quality
- CZRM 100 Retail Management: Industry Project

Distance Education

The following courses are available in a distance education format.

- CRMG 200 Retail Management: Introduction to Retail Management
- CRMG 302 Retail Management: Retail Consumer Insight
- CENT 500 Entrepreneurship: New Venture Startup
- CGMS 200 Global Management: Introduction to Global Management
- CMHR 405 Human Resources: Organizational Behaviour and Interpersonal Skills
- CMHR 523 Human Resources: Human Resources Management
- CMKT 100 Marketing: Principles of Marketing
- CQMS 102 Quantitative Methods: Business Statistics I
- CRMG 400 Retail Management: Buying Process I
- CRMG 452 Retail Management:
 Visual Merchandising and Space Planning
- CRMG 902 Retail Management: Franchising
- CRMG 907 Retail Management: Relationship Marketing
- CRMG 909 Retail Management: Advanced Buying Process II
- CRMG 910 Retail Management: Multi-Channel Retailing

Strategic Marketing

Formerly: Marketing Management

Why strategic? Because you choose the courses you need to meet your career goals. This certificate is designed to meet the needs of marketing professionals wanting to develop expertise in a specific area or take a variety of courses to address knowledge gaps, as well as career changers wanting the fundamentals of marketing.

Admission Requirements

OSSD with six Grade 12 U or M credits, or its equivalent, or mature student status with experience in business is required.

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Admission Application

Students seeking admission to this program are required to submit an application for pre-approval to the academic coordinator for the Certificate in Strategic Marketing. To obtain an application, visit the Forms and Documents section. The completed application, together with transcripts, may be presented to the academic coordinator during the Open House, or mailed to the address on the form.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of six courses, with a cumulative grade point average of 2.00 or higher, is required for the certificate. In exceptional cases credits may be granted on the basis of courses successfully completed at other institutions. Please note that you must apply for formal transfer credit.

STRATEGIC MARKETING SUSTAINABILITY

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/ Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Recommended Sequence

Students are advised that CMKT 100 must be taken before CMKT 300, and both of these courses must be successfully completed prior to enrollment in all other Marketing courses.

Required Courses

Students who demonstrate the requisite combination of education and work experience may apply to the academic coordinator waive CMKT 100. Students granted this waiver must complete five Elective courses instead of four.

- CMKT 100 Marketing: Principles of Marketing
- CMKT 300 Marketing:
 Marketing Metrics and Analysis

Electives

Students select four or five electives from one or more of the five streams.

Marketing Innovation Stream

- · CMKT 500 Marketing: Marketing Research
- CMKT 723 Marketing: Marketing in the Service Industry
- CMKT 730 Marketing: Assessing/Managing Market Opportunities
- CMKT 731 Marketing: Competitive Intelligence

Marketing Research Stream

- CMKT 400 Marketing:
 Understanding Consumers and the New Media
- CMKT 500 Marketing: Marketing Research
- CMKT 700 Marketing: Business Intelligence/Decision Modeling
- CMKT 850 Unassigned placeholder entry: Applied Research Project

Social Media Stream

- CITM 350 Business Technology Management: Concepts of e-Business
- CMKT 400 Marketing: Understanding Consumers and the New Media
- CMKT 510 Marketing: Innovations in Marketing
- CMKT 700 Marketing:
 Business Intelligence/Decision Modeling

Sports Marketing Stream

- CMKT 504 Marketing: Effective Persuasion
- CMKT 828 Marketing: Sport Marketing Concepts and Strategy
- CMKT 829 Unassigned placeholder entry: International Sport Marketing
- CMKT 850 Unassigned placeholder entry: Applied Research Project

Strategic Marketing (General Stream)

- CGMS 522 Global Management: International Marketing
- CITM 350 Business Technology Management: Concepts of e-Business
- CMKT 400 Marketing:
 Understanding Consumers and the New Media
- CMKT 500 Marketing: Marketing Research
- CMKT 504 Marketing: Effective Persuasion
- CMKT 510 Marketing: Innovations in Marketing
- CMKT 600 Marketing: Integrated Case Analysis
- CMKT 700 Marketing: Business Intelligence/Decision Modeling
- CMKT 723 Marketing: Marketing in the Service Industry
- CMKT 730 Marketing: Assessing/Managing Market Opportunities
- CMKT 731 Marketing: Competitive Intelligence
- CMKT 828 Marketing: Sport Marketing Concepts and Strategy
- CMKT 829 Unassigned placeholder entry: International Sport Marketing
- CMKT 850 Unassigned placeholder entry: Applied Research Project

Note to registered certificate program students

Effective Fall 2010, the Certificate in Marketing Management was revised to Strategic Marketing to better prepare you for current and future work in the field. Students who formally register in the certificate after July 1, 2010 will automatically be enrolled in the Strategic Marketing certificate.

Students formally registered in the certificate prior to June 30, 2009, must successfully complete the published certificate curricula from the year you registered in the certificate. *Note: Some courses from the certificate were phased out over the 2009-2010 academic year.*

Students formally registered in the certificate between July 1, 2009 and June 30, 2010, must successfully complete the published certificate curricula from the 2009-2010 academic year. Students in this circumstance who wish to transfer their registration to the new curriculum must complete a Certificate Program Registration/ Transfer Form and submit it to The Chang School by fax at 416.979.5277 or in person at Heaslip House, 297 Victoria Street, Toronto, Ontario, M5B IWI.

Distance Education

The following courses are available in a distance education format.

CMKT 100 Marketing: Principles of Marketing CMKT 300 Marketing:

Marketing Metrics and Analysis

CITM 350 Business Technology Management: Concepts of e-Business

CMKT 400 Marketing:

Understanding Consumers and the New Media

Sustainability

The certificate consists of six courses: three required and three electives. The first required course provides conceptual and theoretical frameworks for understanding how society addresses sustainability issues, and the second required course uses these frameworks to examine sustainability-related issues society faces today. The third required course is a unique capstone course where learners have the opportunity to integrate sustainability's Triple-Bottom Line (TBL or 3BL) – its equal and mutually-reinforcing social, economic, and environmental components – by applying competencies and knowledge acquired throughout the curriculum.

Through three elective courses in specialized streams of Natural Environment, Urban Environment, and Socioeconomics of Sustainability, learners will be equipped with specific knowledge pertinent to their personal goals or professional interests.

For detailed certificate and program information, please visit www.ryerson.ca/ce/sustain.

Admission Requirements

Applicants must complete an application for pre-approval form, be approved by the academic coordinator, and meet one of the following criteria: Undergraduate degree in a relevant field with a GPA of 2.0, or equivalent

OR

A post-secondary diploma with a GPA of 2.0, or equivalent, AND two years of professional experience in a relevant field

)R

A relevant post-secondary certificate with a GPA of 2.0, or equivalent, AND three years of professional practice in a relevant field

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of six single-term courses, with a grade point average of 2.0, is required.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Required Courses

- CKSS 100 Sustainability: Fundamentals in Sustainability I
- CKSS 101 Sustainability:
 Fundamentals in Sustainability II
- CKSS 102 Sustainability: Capstone Experiential Learning Course

Electives

Students select a total of three electives from one or more of the three streams.

Natural Environment Electives

- CKES 130 Environmental Engineering Science: Applied Ecology
- CKES 160 Environmental Engineering Science: Waste Management
- CKES 180 Environmental Engineering Science: Site Assessment
- CKES 190 Environmental Engineering Science: Renewable Energy and Green Technoloy
- CKES 210 Environmental Engineering Science: Applied Environmental Analysis

Urban Environment Electives

- CKAR 500 Architecture: Sustainable Buildings
- CKAR 601 Architectural Preservation and Conservation: Building Science for Architectural Preservation and Conservation
- CKAR 610 Architecture: Architectural Preservation and Conservation Techniques
- CKLA 400 Landscape Design: Ecology and Sustainable Landscapes
- CKLA 430 Landscape Design: Making and Meaning of Landscapes
- CKLA 450 Landscape Design: Landscape Restoration
- CVFN 410 Food Security: Understanding Urban Agriculture

Socioeconomics of Sustainability Electives

- CECN 502 Economics: Economics of Natural Resources
- CECN 510 Economics: Environmental Economics
- CFNY 404 Food Security:
 Food Policy and Programs for Food Security
- CFNY 407 Food Security:
- Community Development and Food Security
 CHTT 510 Hospitality and Tourism: Sustainable
- Tourism Development

 CKSS 201 Sustainability:
 Sustainability Topics and Trends

Note to registered certificate program students

Natural Environment Electives CKES 160 replaces CKES 123.

CKES 180 replaces CKES 150.

CKES 210 replaces CKES 140.

CKES 190 added.

Socioeconomics Electives

CHTT 510 and CKSS 201 added.

Distance Education

The following courses are available in a distance education format.

CFNY 404 Food Security:

Food Policy and Programs for Food Security

CFNY 407 Food Security:

Community Development and Food Security

CKLA 400 Landscape Design:

Ecology and Sustainable Landscapes

CVFN 410 Food Security:

Understanding Urban Agriculture

Telecommunications Management

The telecommunications profession in Canada has grown rapidly. With the introduction of competition to the marketplace and the growing need to move voice, image, and data, the demand for qualified professionals in this area is steadily increasing. Graduates of this certificate will have the skills required for positions involving the use, analysis, design, implementation, and management of telecommunications. The certificate will also provide a perspective on the role and function of information systems.

For further information about the program, please contact The Chang School at 416.979.5035, or attend a Program Open House.

For detailed certificate and program information, please visit www.ryerson.ca/ce/itm.

Admission Requirements

OSSD with six Grade 12 U or M credits, or equivalent, or mature student status, and basic computer literacy and knowledge of the functions of business.

Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a program information session. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of six single-term courses, with a cumulative grade point average of 2.00 or higher, is required for the certificate. Good oral and written communications skills are essential for success in the program.

Credit Policies

Courses may be credited toward the Ryerson Bachelor of Commerce (Information Technology Management) degree program should candidates wish to continue their education after attaining this certificate. See the Ryerson Undergraduate Program Calendar at www.ryerson.ca/calendar for more information.

Up to three course credits may be granted either on the basis of courses successfully completed at other institutions or by writing challenge examinations, which are offered in CITM 315, and CITM 600. Challenge examinations provide the opportunity for applicants with business experience to earn credit and reduce the total number of courses required to complete their certificate program. Only two courses in the certificate can be challenged. All certificate courses are the equivalents or partial equivalents of degree credit courses currently offered by the School of Information Technology Management and are transferable in the event of a student's changing from continuing education student status to program status in the Ted Rogers School of Information Technology Management.

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you registered in the certificate. Certificate requirements must be completed within six years from the time you were first admitted into the certificate program. In some circumstances, certificate requirements may change, resulting in courses no longer being available. In such cases, Course Substitutions/Directives may be requested. Also, you must apply on RAMSS to graduate, prior to the appropriate application deadlines (see Important Dates).

Required Courses

- CITM 301 Business Technology Management: Introduction to IT Infrastructure
- CITM 305 Business Technology Management: Systems Analysis and Design
- CITM 600 Business Technology Management: Data Communications Network Design

Electives (select three)

- CITM 315 Business Technology Management: Network Administration
- CITM 420 Business Technology Management: Information Systems Security and Control
- CITM 513 Business Technology Management: Adv Infrastructure Deployment and Management
- CITM 520 Business Technology Management: Emerging Voice and Multimedia Systems
- CITM 704 Business Technology Management: Wireless and Mobile Communications
- CITM 732 Business Technology Management: Switching and Routing Laboratory
- CITM 750 Business Technology Management: IT Project Management

Note to registered certificate program students

This certificate has been revised effective July 1, 2009. Students who formally registered in the certificate prior to July 1, 2009, must complete the program requirements in effect at the time they registered.

Required Courses

CITM 505 deleted.

Electives

CITM 350, CITM 515, CITM 705, CITM 710, and CITM 715 deleted.

Distance Education

The following courses are available in a distance education format.

CITM 305 Business Technology Management: Systems Analysis and Design

CITM 750 Business Technology Management: IT Project Management

Theory and Principles (2 Required Courses)

Elective Streams (3 Courses)

relevant to student's professional goals



CKSS 100 Fundamentals of Sustainability I

CKSS 101 Fundamentals of Sustainability II

	Natural Environment	Urban Environment	Socioeconomics of Sustainability		
	CKES 130 Applied Ecology	CKAR 500 Sustainable Buildings	CECN 502 Economics and Natural Resources		
	CKES 160 Waste Management	CKAR 601 Building Science for Architectural Presentation and Conservation	CECN 510 Environmental Economics		
	CKES 180 Site Assessment	CKAR 610 Architectural and Presentation Techniques	CFNY 404 Food Policy and Programs for Food Security		
	CKES 190 Renewable Energy and Green Technology	CKLA 400 Ecology and Sustainable Landscapes	CFNY 407 Community Development and Food Security		
	CKES 210 Applied Environmental Analysis	CKLA 430 The Making and Meaning of Landscapes	CHTT 510 Sustainability Tourism Development		
		CKLA 450 Landscape Restoration	CKSS 201 Sustainability Topics and Trends		
		CVFN 410 Understanding Urban Agriculture			

Experiential Learning
(1 Required Course)

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Television Production Fundamentals

The Certificate in Television Production Fundamentals will not be accepting any new registrants. The certificate has been discontinued effective Fall 2011. Students formally registered in the certificate prior to June 30, 2011, must complete the program requirements in effect at the time they registered. For further information, please contact the Communication and Design area at 416.979.5035.

The Chang School Courses and Programs 2011-2012

Course Series

Business Systems Analysis

The Course Series in Business Systems Analysis (BSA) is for individuals who are involved in an organization's business process or system change, including those currently practising business and systems analysis.

The BSA program is currently under review and will not be accepting new registrants at this time. Currently registered students who have completed one or more courses, but have not completed the entire program, are advised to complete the program requirements during the Fall 2011 term.

Required Courses

- CZSA 100 Business Systems Analysis: Business Systems and Strategy
- CZSA 200 Business Systems Analysis: Business Systems Analysis and Design
- CZSA 300 Business Systems Analysis: Business Process Analysis and Design

Gateway for International Professionals

International Accounting and Finance Professionals (IAFP)

The IAFP program is designed to supplement the prior experience and learning of international accounting and finance professionals with the skills and knowledge required in a Canadian context.

The IAFP program prepares you to compete for jobs at levels appropriate to your previous work experience and skills. The accounting stream is designed to accelerate your path towards membership/certification in professional accounting bodies. The IAFP program offers an innovative system of supports:

- individualized pre-screening and prior learning and competency assessment
- courses specific to accounting and financial services practice in Ontario
- profession and sector-specific communication and soft skills training
- expanded employer networking opportunities
- work placements (if required and available)
- mentoring

For further information and admission requirements, visit the IAFP website at www.ryerson.ca/ce/iafp.

Internationally Educated Dietitians Pre-registration Program (IDPP)

The IDPP is a unique learning opportunity designed to give internationally educated nutrition and food professionals information, advice, referral to career opportunities, language testing and training, and, for those who are qualified, preparation for registration with the College of Dietitians of Ontario (CDO) and Dietitians of Canada (DC). The IDPP features two main services:

- pre-registration program designed to help internationally educated dietitians prepare for registration and practice in Ontario
- assessment and counselling for internationally educated nutrition and food professionals who are exploring their education and work options

For further information and admission requirements, visit the IDPP website at www. ryerson.ca/ce/idpp.

The International Midwifery Pre-registration Program (IMPP)

The International Midwifery Pre-registration Program (IMPP) is a nine-month bridging program. It provides internationally educated midwives with the following:

- · skills assessment
- information about how midwives practice in Ontario
- · clinical placements
- mentoring
- · final pre-registration exam

The IMPP is intended for experienced international midwives, fluent in English, who have practised midwifery within the past five years. It is not a re-education or re-training program. There are limited places available in the IMPP, and the admission process is competitive.

For more information and to find out more about your eligibility for the program, visit the IMPP website at www.ryerson.ca/ce/midwife.

Internationally Educated Social Work Professionals (IESW) Program

Are you an internationally educated social work professional who wants to gain a practical and contextual understanding of Ontario's social services sector?

If so, consider registering in courses within the Internationally Educated Social Work Professionals (IESW) Program at The G. Raymond Chang School of Continuing Education.

This innovative bridging program is offered nowhere else in Canada. It provides training, mentorship, support, and supervised work placements for qualified social work professionals who were educated outside of Canada.

In just one year, you can achieve the following:

- increase your understanding of how social work is practiced in Ontario and the rest of Canada
- gain social service experience and orientation to the Canadian workplace
- expand your network of social service employers and organizations

The IESW Program has been designed specifically for internationally educated social work professionals who want to work in the social services sector in Ontario. For further information and admission requirements, visit the IESW website at www.ryerson.ca/ce/socialwork.

Workplace Communication in Canada (WCC)

The Workplace Communication in Canada (WCC) program's goal is to maximize the employability (and leverage preparedness for professional bridging programs) of internationally educated professionals by implementing the following:

- a comprehensive assessment of strengths and individual needs (Communication Skills Assessment)
- a workplace-focused curriculum (materials developed in partnership with employers and profession-specific bridging programs)
- an experiential curriculum (using role plays, simulations with actors, workplace scenarios, debate clubs, and group work)

The WCC Communication Skills Assessment ensures entry to the most appropriate level of communication and language program. In order to make this program sector/profession relevant, each of the learning tools and modules will incorporate profession-related materials and experiences.

For further information and admission requirements, visit the WCC website at www.ryerson.ca/ce/wcc.

Information Technology Studies

.NET Application Developer

C# is an object-oriented programming language developed by Microsoft that uses the Common Language Infrastructure (CLI) for library and runtime support. Students will gain hands-on experience with tools for web application development within the .NET family of products using Visual Studio. This course series may assist you with your preparation for various Microsoft .NET certifications.

This course series is appropriate for learners with a programming background. For further information about this course series, please visit www.ryerson.ca/ce/ITS.

For general admission information, contact ce@ryerson.ca or 416.979.5035. For information about Information Technology Studies, contact Janet Shusterman at itstudies@ryerson.ca or 416.979.5000, ext. 7907.

Those who successfully complete this course series will receive a .NET Application Developer recognition from Ryerson University.

Recommended Sequence

Students are advised to take the Required Courses in the following sequence: CXEC 300 or CXEC 302; CXEC 309; CXEC 304; CXEC 305.

Required Courses

Students may only select one of CXEC 300 or CXEC 302.

- CXEC 300 .NET Application Developer: Programming With C# and the .NET Framework
- CXEC 302 .NET Application Developer: Programming with Visual Basic.Net and the .NET Framework
- CXEC 304 .NET Application Developer: Developing XML Web Services and Server Components with the Microsoft .NET Framework
- CXEC 305 .NET Application Developer: Accessing Data with MS.NET
- CXEC 309 .NET Application Developer: Developing Web Applications with ASP .NET

Supplementary Courses

- CXEC 340 .NET Application Developer: Microsoft SharePoint Web Development
- CXEC 341 .NET Application Developer: Microsoft Silverlight Development

Certified Cisco Networking Associate (CCNA)

This two-course series will provide students with the fundamental skills and knowledge of Cisco technologies. The series may assist you to prepare for the Certified Cisco Networking Associate (CCNA), the first step in Cisco Career Certification.

This course series is appropriate for learners with a network administration background. For further information about this course series, please visit www.ryerson.ca/ce/ITS.

For general admission information, contact ce@ryerson.ca or 416.979.5035. For information about Information Technology Studies, contact Janet Shusterman at itstudies@ryerson.ca or 416.979.5000, ext. 7907.

Those who successfully complete this course series will receive a Certified Cisco Networking Associate recognition from Ryerson University.

Required Courses

- CXNA 101 Certified Cisco Networking Associate (CCNA): Networking Basics for Cisco
- CXNA 102 Certified Cisco Networking Associate (CCNA): Interconnecting Cisco Network Devices (ICND)

Computer and Network Support

Networking-oriented courses are designed to provide the material needed to become proficient with concepts and practices related to today's networking technologies. This program will provide the learner hands-on experience with networking hardware and software, Microsoft and Linux network administration, and system security practices.

Entry into this course series is appropriate for learners who have proficient file management and keyboarding skills as well as experience with an office suite application. For further information about this course series, please visit www.ryerson.ca/ce/ITS.

For general admission information, contact ce@ryerson.ca or 416.979.5035. For information about Information Technology Studies, contact Janet Shusterman at itstudies@ryerson.ca or 416.979.5000, ext. 7907.

Those who successfully complete this course series will receive a Computer and Network Support recognition from Ryerson University.

Recommended Sequence

Students are advised to take the Required Courses in the following sequence: CXIT 401; CXIT 421; CXIT 620 or CXIT 630.

Required Courses

- CXIT 401 Computer and Network Support:
 A+
- CXIT 421 Computer and Network Support: Network Administration for Microsoft
- CXIT 620 Computer and Network Support: Windows Active Directory Planning
- CXIT 630 Computer and Network Support: Network Administration for Linux

Supplementary Courses

 CXCC 104 Computer and Network Support: Certified Information Systems Security Professional (CISSP)

Java EE Solution Developer

Java EE (Enterprise Edition) is the current enterprise level industry standard for object-oriented cross platform distributed application development. This program will provide hands-on experience with tools for web component solution development within the Java EE development architecture including servlets, JSP (JavaServer Pages), EJB (Enterprise JavaBeans), Struts, Spring Framework, JSF (JavaServer Faces), and Hibernate. This program may assist you with your preparation for various Sun certifications.

This course series is appropriate for learners with a programming background. For further information about this course series, please visit www.ryerson.ca/ce/ITS.

For general admission information, contact ce@ryerson.ca or 416.979.5035. For information about Information Technology Studies, contact Janet Shusterman at itstudies@ryerson.ca or 416.979.5000, ext. 7907.

Those who successfully complete this course series will receive a Java EE Solution Developer recognition from Ryerson University.

Recommended Sequence

Students are advised to take the Required Courses in the following sequence: CXEC 320; CXEC 312; CXEC 313; CXEC 322 or CXEC 324.

Required Courses

Students may only select one of CXEC 322 or CXEC 324.

- CXEC 312 Java EE Solution Developer: Developing J2EE Compliant Applications (JavaBeans)
- CXEC 313 Java EE Solution Developer: Web Component Development with Java Technology (Servlets and JSP)
- CXEC 322 Java EE Solution Developer: Developing Advanced Web Applications Using Java
- CXEC 324 Java EE Solution Developer: Spring and Hibernate Java Apps

Supplementary Courses

 CXEC 328 Java EE Solution Developer: Android Wireless Application Development

Website Design and Development

This course series will provide learners with the foundation to design and develop creative websites by providing the skills required to control the way a website is displayed as well as incorporate dynamic functionality.

Entry into this course series is appropriate for learners who have proficient file management and keyboarding skills as well as experience with an office suite application. For further information about this course series, please visit www.ryerson.ca/ce/ITS.

For general admission information, contact ce@ryerson.ca or 416.979.5035. For information about Information Technology Studies, contact Janet Shusterman at itstudies@ryerson.ca or 416.979.5000, ext. 7907.

Those who successfully complete this course series will receive a Website Design and Development recognition from Ryerson University.

Recommended Sequence

Students are advised to take the Required Courses in the following sequence: CXCP 663; CXCP 185; CXCP 673; CXCP 679 or CXCP 700.

Required Courses

Students may only select one of CXCP 679 or CXCP 700.

- CXCP 185 Website Design and Development: Adobe Creative Suite for the Web
- CXCP 663 Website Design and Development: HTML and Cascading Style Sheets
- CXCP 673 Website Design and Development: JavaScript
- CXCP 679 Website Design and Development: Flash
- CXCP 700 Advanced Website Design and Development: Advanced Dreamweaver with CSS

Supplementary Courses

- CXCP 184 Website Design and Development: Adobe Photoshop
- CXCP 685 Website Design and Development: PHP/My SQL Web Design Fundamentals
- CXCP 695 Website Design and Development: eCommerce Design with PHP/ MySQL
- CXCP 705 Website Design and Development: Ajax with jQuery Introduction

Programs for 50+

Caring Clown

This program is for older adults who want to make a difference by bringing joy, laughter, and fun into the lives of long-term care residents. Through several courses, students are trained in clowning techniques and achieve an understanding of aging and the dementia process. In addition, working closely with long-term care homes, a practicum provides an opportunity for the Caring Clown to gain experience.

Those who successfully complete this course series will be awarded a recognition of achievement. For general information, contact mena.carravetta@ryerson.ca or 416.979.5103.

For further information about this course series, please visit www.ryerson.ca/ce/programs5oplus.

Required Courses

- CSAC 109 ACT II STUDIO:
 Clown and Comedy: Introduction to Clown
- CSAC 910 ACT II STUDIO: Clown and Comedy: Caring Clown Basics
- CSAC 911 ACT II STUDIO: Clown and Comedy: Caring Clown Practicum

Retail and Services Management

Retail Buying

Students will examine the role of the buyer, the procurement process, and merchandise management. An exploration of in-store design, layout, and display options using space planning software will also be covered.

For more information, please visit www.ryerson. ca/ce/retail or contact Sean Sedlezky, Academic Coordinator, Retail Management at ssedlezk@ryerson.ca.

Required Courses

- CRMG 400 Retail Management: Buying Process I
- CRMG 452 Retail Management: Visual Merchandising and Space Planning
- CRMG 909 Retail Management: Advanced Buying Process II

Retail Operations

Students will examine a variety of systems relevant to the retail environment through case studies, simulations, and online discussions. Other topics will include teamwork, employee motivation, retail metrics, and meeting consumers' needs.

For more information, please visit www.ryerson.ca/ce/retail or contact Sean Sedlezky, Academic Coordinator, Retail Management at ssedlezk@ryerson.ca

Required Courses

- CRMG 301 Retail Management: Retail Operations Processes and Value Chn
- CRMG 900 Retail Management: Retail Operations I: HR Challenges
- CRMG 901 Retail Management: Retail Operations II: Productivity Issues

Urban Agriculture

In order to help students develop their skills and capacity to address global problems, specifically those related to the current global food crisis and climate change, an urban agriculture course series has been developed as part of the elective offerings of The Chang School's Certificate in Food Security. The series will consist of four courses and students who complete them will receive official acknowledgement from the University of having achieved completion.

The four courses, which are all available via distance education, are:

- Understanding Urban Agriculture (CVFN 410)
 see sample course outline
- Dimensions of Urban Agriculture (CVFN 411)
 see sample course outline
- Urban Agriculture Types (CVFN 412) see sample course outline
- Urban Agriculture Policy-Making (CVFN 413)
 see sample course outline

Students who complete this course series will gain in-depth knowledge of the technical aspects of urban agriculture as well as the policy dimensions and governance issues that must be taken into account in the development of effective urban agriculture systems.

For more information about the Course Series in Urban Agriculture, please view our flyer.

Note: These courses have been developed in partnership with ETC-Urban Agriculture (ETC-UA) and the international network of Resource Centres on Urban Agriculture and Food Security (RUAF).