Programs

The G. Raymond Chang School of Continuing Education offers an extensive range of career-oriented programs in various areas of interest: Business, Management, and Economics; Communication and Media; Community Health and Well-being; Computer and Information Technology; Design; Gateway for International Professionals; Languages; Law and Government; Liberal Arts; and Science and Engineering.

PROGRAMS

Part-Time Degree Programs

The part-time degree programs listed below will advance your professional qualifications within your present field or lay the groundwork for a new career.

Business Management
Computer Science
Child and Youth Care
Criminal Justice
Disability Studies
Early Childhood Education
Health Information Management
Health Services Management
Information Technology Management
Midwifery
Nursing
Public Administration and Governance
Social Work
Retail Management

Some part-time degree courses are offered through The Chang School, however it is your responsibility to ensure that courses meet the stated requirements of your program. Full information about part-time degree programs can be found in the Ryerson University Part-Time Undergraduate Calendar at **www.ryerson.ca/calendar**.

Certificate Programs

Accounting – Finance

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

This program is designed for those who want a good understanding of the current principles and practices in accounting–finance in Canada.

For those planning a career in the field, this certificate can lead to accreditation from a professional association. For further details, see CA, CGA, and CMA information.

Admission Requirements
OSSD with six Grade 12 U or M credits, or equivalent, or mature student status with experience in 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 Information Nights
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 Information Nights 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. After completion of the six required courses, students then select a further two courses from the electives. 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
- CACC 110   Accounting: Financial Accounting for Accounting Majors
- CACC 410   Accounting: Management Accounting for Accounting Majors
- CACC 414   Accounting: Intermediate Accounting I
- CACC 514   Accounting: Intermediate Accounting II
- CFIN 300   Finance: Managerial Finance I
- CFIN 401   Finance: Managerial Finance II

Electives (select two)
- CACC 504   Accounting: Accounting Cases and Concepts I
- CACC 507   Accounting: Accounting for Managers
- CACC 521   Accounting: Auditing
- CACC 522   Accounting: Taxation for Managers and Financial Planners
- CACC 607   Accounting: Accounting for Small Business
- CACC 621   Accounting: Internal Auditing
- CFIN 502   Finance: Personal Financial Planning
- CITM 102   Business Technology Management: Business Information Systems I
- CLAW 122   Law: Business Law
- CQMS 102   Quantitative Methods: Business Statistics I

Note to registered certificate program students
Required Courses
CACC 110 replaces CACC 100.
CACC 410 replaces CACC 406.
Electives
CACC 605 deleted.

Note: Some of the courses in the Accounting – Finance certificate program may qualify for exemption in the Chartered Accountants Education Program, Certified General Accountants Association of Ontario, or the CMA Canada programs. For more details, see Professional Institutes and Associations.

Distance Education

The following courses are available in a distance education format.
CACC 110   Accounting:
Financial Accounting for Accounting Majors
CACC 410   Accounting:
Management Accounting for Accounting Majors
CACC 414   Accounting:
Intermediate Accounting I
CACC 514   Accounting:
Intermediate Accounting II
CFIN 300   Finance: Managerial Finance I
CFIN 401   Finance: Managerial Finance II
CFIN 502   Finance: Personal Financial Planning
CITM 102   Business Technology Management:
Business Information Systems I
CLAW 122   Law: Business Law
CQMS 102   Quantitative Methods:
Business Statistics I

Advanced Neuroscience – Stroke Care

This 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**.

Academic Coordinator: 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 academic coordinator 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 Information Night. For further information, contact The G. Raymond Chang School of Continuing Education office by email or 416.979.5035.

PROGRAMS

Program Information Nights

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 Information Nights 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

Advanced Safety Management

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

This certificate program in Advanced Safety Management was developed in cooperation with the Ryerson School of Occupational and Public Health. This is a unique offering of safety management courses that are part of the Bachelor of Applied Science degree in the Occupational Health and Safety option within the School of Occupational and Public Health. It is applicable to all types of industries, and is designed for those individuals who have completed Ryerson's Certificate in Occupational Health and Safety, or equivalent, and wish to expand their knowledge base and improve their skills.

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

Admission Requirements

Option 1: Successful completion of Ryerson Certificate in Occupational Health and Safety or its equivalent.

OR

Option 2: OSSD with six OAC credits or Grade 12 U or M credits, or equivalent, or mature student status, and five years of professional experience in a field relevant to occupational health and safety, plus successful completion of these courses:

COHS 208   Occupational Health:
Occupational Health and Safety Law
COHS 718   Occupational Health:
Systems Management I

Note: Students who successfully apply for admission to the degree program will be permitted advanced standing in the degree program for only those courses that they have successfully completed in either of these two certificate programs. Therefore, students who intend to pursue the degree program should choose Option 1 above.

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 Information Nights

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 Information Nights for dates, times, and location.

Challenge Credits

Up to two courses within the program are available for challenge.

Certificate Requirements

The successful completion of the eight required 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

- COHS 323   Occupational Health: Accident Theory and Analysis
- COHS 516   Occupational Health: Ergonomics
- COHS 523   Occupational Health: Safety Evaluation Techniques
- COHS 623   Occupational Health: Safety Control Methods
- COHS 723   Occupational Health: Sectoral Applications I
- COHS 818   Occupational Health: Systems Management II
- COHS 823   Occupational Health: Sectoral Applications II
- COHS 833   Occupational Health: Fire Safety Management

Distance Education

The following courses are available in a distance education format.
COHS 323   Occupational Health: Accident Theory and Analysis
COHS 516   Occupational Health: Ergonomics
COHS 523   Occupational Health: Safety Evaluation Techniques
COHS 623   Occupational Health: Safety Control Methods
COHS 723   Occupational Health: Sectoral Applications I
COHS 818   Occupational Health: Systems Management II
COHS 823   Occupational Health: Sectoral Applications II
COHS 833   Occupational Health: Fire Safety Management
COHS 208   Occupational Health: Occupational Health and Safety Law
COHS 718   Occupational Health: Systems Management I

PROGRAMS

Applied Digital Geography and GIS

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

This certificate program has been developed for professionals currently practising or anticipating careers in government, industry, utilities, planning, municipal services, health, and retailing, who wish to enhance their professional skills in digital geography and geographic information systems (GIS). The certificate is designed to provide both training and education in digital geography.

The program responds to today's need for enhanced computer literacy in the management and analysis of digital spatial data, and the application of that data in decision-making. Digital geography is an area of study that concentrates on the electronic capture, storage, manipulation, and analysis of geographic data. Using location as the "look-up" key, disparate data sets can be linked and related to each other for a whole range of workplace applications. Following initial courses in which principles and concepts of digital geography and fundamental skills in GIS are introduced, the workplace applications are stressed in courses aimed at specific specialties. Higher level courses focus on refining GIS tools and implementation issues.

Students in the program are expected to have a working knowledge of desktop PC Windows environments.

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

Academic Coordinator: Don Kendal, dkendal@geography.ryerson.ca or 416.979.5000, ext. 7149.

Admission Requirements

Undergraduate degree or college diploma in an acceptable related field is required. Applicants must complete an application for pre-approval and be approved before registering for the first course. Forms are available at **www.ryerson.ca/ce/gis**.

Program Information Nights

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 Information Nights for dates, times, and location.

Advanced Credit

All applicants to the program are eligible to apply for advanced standing, with credit being granted for course work undertaken, or for professional practice, providing the course work or professional practice meets or exceeds the academic goals and content of the program courses for which credit is being sought. Advanced credit applications will be evaluated by the academic coordinator and the program director, and subject to normal Ryerson admission policies and procedures. Students may be required to take a challenge examination in order to ascertain eligibility for advanced standing. Students will be eligible for a maximum of three course credits toward the certificate.

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).

PROGRAMS

Required Courses

The introductory core courses are designed to provide the student with a good contextual background in digital databases and the principles of applied digital geography. They form the foundation upon which further courses rest and students must complete both courses before continuing.

- CODG 101   Digital Geography: Spatial Databases and Digital Cartography
- CODG 102   Digital Geography: Digital Geography and Spatial Analysis

Electives (select a total of four courses)

Electives – Group A (select one or two)

Five professional applications courses allow the student to focus on an area of interest.

- CODG 123   Digital Geography: Digital Geography Applications in Utilities Planning
- CODG 124   Digital Geography: Digital Geography Applications in Business Decision-Making
- CODG 125   Digital Geography: Digital Geography Applications for the Municipal Professional
- CODG 126   Digital Geography: Digital Geography Applications in Environmental Management
- CODG 127   Digital Geography: Digital Geography Applications in Community and Social Services

Electives – Group B (select two or three)

These courses are designed to provide the student with some understanding of the more complex core skills and issues facing business, municipal, environmental, utilities or community and social services professionals when they employ digital geography in their decision making.

- CODG 130   Digital Geography: Legal and Ethical Issues in GIS and Digital Data
- CODG 131   Digital Geography: Issues and Innovations
- CODG 132   Digital Geography: Customizing GIS Software: Applications Programming
- CODG 133   Digital Geography: Map Algebra: Topology and Overlay
- CODG 135   Digital Geography: Digital Image Processing and Applications
- CODG 136   Digital Geography: Web Mapping

As the sixth course for certificate completion, students may take one course in the first level of the Advanced Certificate in Applied Digital Geography and GIS (provided the prerequisite is met).

Note to registered certificate program students

Required Courses

CODG 101 replaces CODG 100.
CODG 102 replaces CODG 110.

Electives – Group A

COGT 120 deleted.
CODG 127 added.

Electives – Group B

CODG 136 and option of taking a course from the First Level of the Advanced Certificate in Applied Digital Geography and GIS added.

Note: Because most courses have a significant lab component and since there are a limited number of lab stations, enrollment in most courses is limited to 30 registrants.

Distance Education

The following courses are available in a distance education format.

CODG 101   Digital Geography: Spatial Databases and Digital Cartography
CODG 102   Digital Geography: Digital Geography and Spatial Analysis
CODG 124   Digital Geography: Digital Geography Applications in Business Decision-Making
CODG 125   Digital Geography: Digital Geography Applications for the Municipal Professional
CODG 131   Digital Geography: Issues and Innovations
CODG 132   Digital Geography: Customizing GIS Software: Applications Programming
CODG 136   Digital Geography: Web Mapping

PROGRAMS

Advanced Applied Digital Geography and GIS

The advanced certificate offers a sequence of courses that combine to form a comprehensive package of principles and practice in advanced-level GIS education and training for GIS professionals. It builds on the courses in the first Certificate in Applied Digital Geography and GIS to provide greater conceptual understanding and technical expertise in this increasingly complex industry.

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

Academic Coordinator: Don Kendal, dkendal@geography.ryerson.ca or 416.979.5000, ext. 7149.

Admission Requirements

Successful completion of the Certificate in Applied Digital Geography and GIS or its equivalent is required. An interview with the academic coordinator is required to facilitate assessment of prior learning. Official documentation of English proficiency may be required if English is not the first language of the applicant. Application forms are available at **www.ryerson.ca/ce/gis**.

Program Information Nights

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 Information Nights 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 – First Level (select four or five)

Students must select one course not previously taken from the Group B Electives in the Certificate in Applied Digital Geography and GIS.

- CODG 210 Digital Geography: Spatial Database Management Systems
- CODG 211 Digital Geography: Advanced GIS Programming
- CODG 212 Digital Geography: Spatial Statistical Methods
- CODG 213 Digital Geography: Internet GIS

Required Courses – Second Level (select one or two)

- CODG 220 Digital Geography: GIS Implementation
- CODG 221 Digital Geography: GIS Project

PROGRAMS

Architectural Preservation and Conservation

This is a highly technical certificate program consisting of eight courses focused on subjects related to building renovation, restoration and rehabilitation, and historical preservation and conservation. The program is designed to provide graduates with specific knowledge and skills in architectural preservation and conservation. While the core courses provide a strong grounding in general issues, the electives allow the students to choose an area of interest or specialization – history, project management, or preservation technologies.

Admission Requirements
Graduates of the Ryerson Advanced Certificate in Architecture
Graduates of the Ryerson Advanced Certificate in Architecture are deemed to have met the admissions requirements.

Graduates of North American Architectural Schools
This program is offered at a post-graduate level. To ensure that students have attained a sufficient understanding of the required background in architecture and design, applicants admitted to this program will normally possess a post-secondary undergraduate education (university or college) in a relevant field of study:
- architecture
- architectural technology
- building science*
- engineering technology*

Upgrading course may be required for these graduates prior to formal enrollment in the program.
Applicants must demonstrate an understanding of the following, through their undergraduate studies:
- architectural theory and design
- history of Western architecture
- structural engineering
- materials and methods of North American cold climate construction
- building systems (mechanical and electrical)

Graduates of Non-North American Architectural Schools
Graduates from non-North American architectural schools are required to take the following courses prior to admission:
CKAR 310   Architecture: Materials and Methods

Graduates of Non-Architectural Programs
Applicants without architectural training will be required to take the following upgrading courses in order to be considered for admission:
CKAR 103   Architecture:
Architectural Studio - Fundamental
CKAR 201   Architecture:
Mechanical and Electrical Systems for Buildings
CKAR 207   Architecture:
Architectural History: Prehistoric to Medieval
CKAR 208   Architecture:
Architectural History: Renaissance to Post-Modern
CKAR 300   Architecture: Architectural Drawing
CKAR 310   Architecture: Materials and Methods

Other Requirements
Applicants are also recommended to have working knowledge of computer operations and computer-aided design/drafting. Advanced standing/challenge credit will be granted to applicants with prior learning in courses equal in content and scope. The University's policies will apply.

Applicants who do not hold a post-secondary undergraduate degree or diploma but who possess an appropriate combination of education and experience in architecture and/or architectural preservation and conservation may be considered for admission on an individual basis.

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 Information Nights
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 Information Nights for dates, times, and location.

Certificate Requirements
The successful completion of six courses (four required courses from the core curriculum and of two electives) is required for the certificate.

PROGRAMS

For further information about the program, please contact the Academic Coordinator, Yew-Thong Leong at 416.979.5000, ext. 6498, or attend a program information night.

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 or six terms. Planning your studies according to one of these models allow you to complete your certificate a pace suitable to you.

Required Courses

- CKAR 600   Architectural Preservation and Conservation: Architecture Preservation and Conservation Workshop
- CKAR 601   Architectural Preservation and Conservation: Building Science for Architectural Preservation and Conservation
- CKAR 604   Architectural Preservation and Conservation: Management and Regulatory Framework
- CKAR 610   Architecture: Architectural Preservation and Conservation Techniques

Electives (select two)

- CENT 500   Entrepreneurship: New Venture Startup
- CKAR 203   Architecture: Specifications and Contractual Documents
- CKAR 204   Architecture: Cost Estimating and Control
- CKAR 209   Architecture: Digital Graphics for Architecture and Design
- CKAR 210   Architecture: Toronto: An Architectural History
- CKAR 500   Architecture: Sustainable Buildings
- CKAR 605   Architectural Preservation and Conservation: Comprehensive Seminar/Project
- CKDA 602   Digital Architecture: Digital Architectural Modelling
- CKDA 603   Digital Architecture: Digital Architectural Rendering I
- CKLA 400   Landscape Design: Ecology and Sustainable Landscapes
- CKLA 410   Landscape Design: Horticultural Science
- CKPM 202   Project Management: Fundamentals of Project Management
- CKPM 213   Project Management: Management of Projects in the AEC
- CKPM 214   Project Management: Project Development and Control

For the most current information, see our website at **www.ryerson.ca/ce.**

Candidates may also take up to two courses in Material Analysis and Testing from the Centre for Advanced Building Technologies, George Brown College, as electives. Contact William K. Juranic, Chair, Technology, Centre for Continuous Learning, 416.415.4358, or Chair, Centre for Advanced Building Technologies, 416.415.4388, both at George Brown College. These courses may be considered for transfer credit when completed with a grade of B or better, where B equals at least 70 percent. A Letter of Permission is required from the academic coordinator.

Candidates may also take up to two courses in the history of Medieval, Renaissance, Baroque/Rococo, modern, or vernacular/colloquial architecture. Candidates are to consult the academic coordinator for a list of approved courses. A Letter of Permission is required from the academic coordinator.

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
CKAR 610 replaces CKAR 602 and CKAR 603.
CKAR 605 deleted.
Electives
CKAR 205 deleted.
CENT 500, CKAR 209, CKAR 500, CKAR 605, CKDA 602, CKDA 603, CKLA 109, CKLA 110, CKLA 400, CKLA 410, CKPM 213, and CKPM 214 added.

Distance Education
The following courses are available in a distance education format.
CENT 500   Entrepreneurship: New Venture Startup
CKLA 400   Landscape Design: Ecology and Sustainable Landscapes
CKLA 410   Landscape Design: Horticultural Science
CKPM 202   Project Management: Fundamentals of Project Management

Architecture

This certificate program is designed for those wishing to enter the field of architecture, as well as those already employed in the field and wishing to improve their skills and credentials. With additional courses, this six-course certificate is recognized by the Association of Architectural Technologists of Ontario (AATO) as meeting the educational requirements for membership as a Probationer Technician. Students interested in the AATO should refer to the Professional Institutes and Associations section.

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 science.

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 Information Nights
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 Information Nights 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. A maximum of three course credits may be granted on the basis of equivalent courses successfully completed at other post-secondary institutions or fully documented work experience. After completing the five required courses, students may select from the elective courses listed.

It is recommended that the required courses be taken in the following order: CKAR 300, CKAR 310, CKAR 205, and CKAR 103.

For further information about the program, please contact the Academic Coordinator, Yew-Thong Leong at 416.979.5000, ext. 6498, or attend a program information night.

PROGRAMS

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 or six terms. Planning your studies according to one of these models allow you to complete your certificate a pace suitable to you.

Certificate in three terms

FALL 1:	CKAR 300, CKAR 310
WINTER 1:	CKAR 103, CKAR 205
FALL 2:	Electives (two)

Certificate in six terms

FALL 1:	CKAR 310
WINTER 1:	CKAR 205
SPRING/SUMMER 1:	Elective
FALL 2:	CKAR 300
SPRING/SUMMER 2:	Elective

Note: Pathways may be combined so that a student begins with one course per term then switches to two courses per term, or vice versa.

Required Courses
- CKAR 103 Architecture: Architectural Studio - Fundamental
- CKAR 205 Architecture: Building Codes and Regulations
- CKAR 300 Architecture: Architectural Drawing
- CKAR 310 Architecture: Materials and Methods

Electives (select two)
- CENT 500 Entrepreneurship: New Venture Startup
- CKAR 203 Architecture: Specifications and Contractual Documents
- CKAR 204 Architecture: Cost Estimating and Control
- CKAR 209 Architecture: Digital Graphics for Architecture and Design
- CKAR 210 Architecture: Toronto: An Architectural History
- CKAR 500 Architecture: Sustainable Buildings
- CKAR 605 Architectural Preservation and Conservation: Comprehensive Seminar/Project
- CKDA 602 Digital Architecture: Digital Architectural Modelling

- CKDA 603 Digital Architecture:
  Digital Architectural Rendering I
- CKLA 400 Landscape Design:
  Ecology and Sustainable Landscapes
- CKLA 410 Landscape Design:
  Horticultural Science
- CKPM 202 Project Management:
  Fundamentals of Project Management
- CKPM 213 Project Management:
  Management of Projects in the AEC
- CKPM 214 Project Management:
  Project Development and Control

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

CKAR 300 replaces CKAR 101 and CKAR 102.
CKAR 310 replaces CKAR 104 and CKAR 105.

Electives

CKAR 205 is now a Required Course.
CKAR 202, CKAR 206, CKAR 207, and CKAR 208 deleted.
CENT 500, CKAR 209, CKAR 500, CKAR 605, CKDA 602, CKDA 603, CKLA 109, CKLA 110, CKLA 400, CKLA 410, CKPM 202, CKPM 213, and CKPM 214 added.

Distance Education

The following courses are available in a distance education format.
CENT 500 Entrepreneurship: New Venture Startup
CKLA 400 Landscape Design: Ecology and Sustainable Landscapes
CKLA 410 Landscape Design: Horticultural Science
CKPM 202 Project Management: Fundamentals of Project Management

Advanced Architecture

This advanced certificate will be of particular interest to those actively engaged in the architectural or related fields who are seeking the educational requirements for accreditation as an architectural technologist. It will also be of interest to those holding non-Canadian diplomas who are seeking Canadian qualifications in the architectural field.

Association of Architectural Technologist of Ontario

The Association of Architectural Technologist of Ontario (AATO) recognizes successful completion of the Advanced Certificate in Architecture as fulfilling the academic component of the Probational Technologist membership requirements. Please see AATO under Professional Designations for more details.

Ontario Association for Applied Architectural Sciences

The Ontario Association for Applied Architectural Sciences (OAAAS) recognizes successful completion of the Advanced Certificate in Architecture as fulfilling the academic component of the membership requirements. Please see OAAAS under Professional Designations for more details.

Admission Requirements

Successful completion of the Certificate in Architecture or equivalent academic qualifications and 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 Information Nights

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 Information Nights for dates, times, and location.

PROGRAMS

Certificate Requirements

The successful completion of six courses is required for the advanced certificate. A maximum of three course credits may be granted on the basis of equivalent courses successfully completed at other post-secondary institutions or fully documented work experience.

For further information about the program, please contact the Academic Coordinator, Yew-Thong Leong at 416.979.5000, ext. 6498, or attend a program information night.

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 or six terms. Planning your studies according to one of these models allow you to complete your certificate a pace suitable to you.

Required Courses

- CCMN 432   Communication:
  Communication in the Engineering Professions
- CKAR 201   Architecture:
  Mechanical and Electrical Systems for Buildings
- CKAR 206   Architecture:
  Computer-Aided Architectural Drawing
- CKAR 601   Architectural Preservation and Conservation: Building Science for Architectural Preservation and Conservation

Electives (select two)

- CENT 500   Entrepreneurship:
  New Venture Startup
- CKAR 203   Architecture:
  Specifications and Contractual Documents
- CKAR 204   Architecture:
  Cost Estimating and Control
- CKAR 209   Architecture:
  Digital Graphics for Architecture and Design
- CKAR 210   Architecture:
  Toronto: An Architectural History
- CKAR 500   Architecture: Sustainable Buildings
- CKAR 605   Architectural Preservation and Conservation: Comprehensive Seminar/Project
- CKDA 602   Digital Architecture:
  Digital Architectural Modelling
- CKDA 603   Digital Architecture:
  Digital Architectural Rendering I
- CKLA 400   Landscape Design:
  Ecology and Sustainable Landscapes
- CKLA 410   Landscape Design:
  Horticultural Science
- CKPM 202   Project Management:
  Fundamentals of Project Management
- CKPM 213   Project Management:
  Management of Projects in the AEC
- CKPM 214   Project Management:
  Project Development and Control

PROGRAMS

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

CKAR 206 added.

Electives

CKAR 202, CKAR 205, CKAR 206, CKAR 207, and CKAR 208 deleted.

CENT 500, CKAR 209, CKAR 500, CKAR 605, CKDA 602, CKDA 603, CKLA 109, CKLA 110, CKLA 400, CKLA 410, CKPM 202, CKPM 213, and CKPM 214 added.

Distance Education

The following courses are available in a distance education format.

- CENT 500   Entrepreneurship:
  New Venture Startup
- CKLA 400   Landscape Design:
  Ecology and Sustainable Landscapes
- CKLA 410   Landscape Design:
  Horticultural Science
- CKPM 202   Project Management:
  Fundamentals of Project Management

Audio Production Fundamentals

Students will receive a basic hands-on understanding of the production tools used across the full range of the audio industry, with special emphasis in audio applications in new media. This will be supported by theoretical material that provides both a context and a critical lens through which they may view their production 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 Information Night. Incomplete applications will not be considered.

Program Information Nights

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 Information Nights for dates, times, and location.

Certificate Requirements

The successful completion of six or seven courses (total course hours 286), with a cumulative grade point average of 2.00 or higher, is required for the certificate.

PROGRAMS

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 111   Broadcasting and Media Production: Media Tech Theory I - Audio and Digital Media
- CBDC 191   Broadcasting and Media Production: Audio Production I
- CBDC 905   Broadcasting and Media Production: The Business of Music

Electives (select 9 hours)
6–Hour Courses
- CBDC 301   Broadcasting and Media Production: Production - Audio

3–Hour Courses
- CBDC 974   Broadcasting and Media Production: Audio Post-Production and Sound Design
- CBDC 975   Broadcasting and Media Production: Sound Synthesis
- CBDC 979   Broadcasting and Media Production: Radio Production

Note to registered certificate program students
Required
CBDC 191 replaces CBDC 101.

Business Analysis

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

This certificate program provides an in-depth study of the fundamentals of quantitative management methods. It is designed to develop skills and knowledge necessary for the effective use of the vast amounts of data available today for business analysis and quality control.

Admission Requirements

OSSD with six Grade 12 U or M credits (including one in Mathematics), or equivalent, or mature student status with some experience in 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 Information Nights

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 Information Nights 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.

Computer Support

Some Quantitative Methods courses rely heavily on computer support. Limited computer facilities are provided by Ryerson. When access to the mainframe is required, students are issued account numbers. Supplies to Be Purchased by the Student

A calculator with specialized statistical features is integral to many Quantitative Methods courses. Software and calculator specifications will be announced at the first class.

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 200   Global Management: Introduction to Global Management
- CITM 102   Business Technology Management: Business Information Systems I
- CQMS 102   Quantitative Methods: Business Statistics I
- CQMS 202   Quantitative Methods: Business Statistics II

Electives (select four)

Students may select only one of CHTH 102 or CMKT 723.

- CCMN 313   Communication: Organizational Problem Solving and Report Writing
- CGMS 402   Global Management: Introduction to Managerial Economics
- CGMS 422   Global Management: Quality Management
- CHTH 102   Hospitality and Tourism: Service and Professionalism
- CMKT 500   Marketing: Marketing Research
- CMKT 723   Marketing: Marketing in the Service Industry
- CQMS 442   Quantitative Methods: Multiple Regression for Business
- CQMS 521   Quantitative Methods: Business Optimization

Note on Electives: *For a research focus select CMKT 423, CQMS 442, CQMS 641, and one other.*

Note to registered certificate program students

Required
CGMS 200 replaces CMGT 200.
Electives
CITM 611, CQMS 621, and CQMS 641 deleted.
CGMS 422 replaces CQMS 402.
CMKT 500 replaces CMKT 423.

Distance Education

The following courses are available in a distance education format.
CGMS 200   Global Management: Introduction to Global Management
CITM 102   Business Technology Management: Business Information Systems I
CQMS 102   Quantitative Methods: Business Statistics I
CCMN 313   Communication: Organizational Problem Solving and Report Writing
CHTH 102   Hospitality and Tourism: Service and Professionalism

Business Communication

This certificate program will help individuals develop a high level of competence in communication, particularly in business and government organizations. The program focuses on helping students learn how to complete the following:

- write letters, memoranda, and reports that are concise, lucid, and effective
- plan and deliver informative and persuasive oral presentations without undue stress or stage fright
- generate information through library research, database searches, systematic observation, interviews, and surveys
- analyze information to yield conclusions that will be understood and recommendations that will be acted upon
- use careful organization, headings, and visual aids to produce reports that are impressive to look at and informative to read
- interact effectively in small groups and committees
- foster an organizational environment which encourages effective communication by all employees

All courses with the exception of CCMN 415 and CDCM 300 are degree program equivalents, and may be taken for credit independently from the certificate.

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.

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 Information Nights

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 Information Nights for dates, times, and location.

Certificate Requirements

The successful completion of eight courses (six required courses and two electives), with a cumulative grade point average of 2.00 or higher, is required for the certificate. It is recommended that students begin the program with CCMN 279.

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 279 Communication: Introduction to Contemporary Business Comm
- CCMN 313 Communication: Organizational Problem Solving and Report Writing
- CCMN 314 Communication: Professional Presentations
- CCMN 413 Communication: Corporate Communications
- CCMN 414 Communication: Interpersonal Communication in Management
- CCMN 443 Communication: Contemporary Intercultural Communication

Electives (select two)

- CCMN 315 Communication: Issues in Communication and the Contemporary Workplace
- CCMN 415 Communication: Promotional Communications
- CCMN 447 Communication: Communication and Law
- CCMN 448 Communication: Introduction to Visual Communication
- CDCM 300 Communication: Communicating in Virtual Environments
- CFRE 502 French: Advanced Business French I

PROGRAMS

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.

Required
CMHR 405 deleted.
CCMN 443 added.

Electives
CCMN 443 is now a Required course.
CITM 102 and CMHR 505 deleted.
CCMN 315, CCMN 415, CCMN 447, and CCMN 448 added.

Distance Education
The following courses are available in a distance education format.
CCMN 279   Communication: Introduction to Contemporary Business Comm
CCMN 313   Communication: Organizational Problem Solving and Report Writing

Business French and Translation

This certificate program is designed mainly for individuals working or intending to work in French in a business environment. The program offers a range of specialized and practical courses permitting students to improve their communication and translation skills, thus adding to their professional qualifications and career opportunities.

Admission Requirements
Certificate of Proficiency in French from Ryerson, or the completion of CFRE 510 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 Information Nights
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 Information Nights for dates, times, and location.

Certificate Requirements
The Certificate in Business French and Translation is usually granted on completion of six single-term credit courses, with a cumulative grade point average of 2.00 or higher, beginning with CFRE 515 or CFRE 610. A student may be admitted to a higher level by interview, but must successfully complete a minimum of five single-term credit courses, with a cumulative grade point average of 2.00 or higher, to obtain the certificate. A student granted an exemption from taking CFRE 515 or CFRE 610 will need to complete five higher-level 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 (select six)

Students may select only one of CFRE 515 or CFRE 610.

- CFRE 502   French: Advanced Business French I
- CFRE 507   French: English-French Translation I
- CFRE 515   French: Introduction to Business French
- CFRE 602   French: Advanced Business French II
- CFRE 607   French: English-French Translation II
- CFRE 610   French: Advanced Grammar and Writing II
- CFRE 706   French: Cultural Evolution of the French Language
- CFRE 707   French: Introduction to French-English Translation

Note to registered certificate program students

CFRE 515 replaces CFRE 510.
CFRE 510 deleted.
CFRE 706 added.

Business Management I

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

This program provides an overall management perspective and all the requirement competencies for those planning a career in business. These programs are ideal for those already employed in business and industry who wish to expand their knowledge of business concepts and practices.

Admission Requirements

OSSD with six Grade 12 U or M credits, or equivalent, or mature student status with experience in 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 Information Nights

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 Information Nights 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. 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

Students may select one of CACC 100 or CACC 110. Students planning on pursuing the Accounting Finance Major must enroll in CACC 110.

- CACC 100   Accounting:
  Introductory Financial Accounting
- CACC 110   Accounting:
  Financial Accounting for Accounting Majors
- CECN 104   Economics:
  Introductory Microeconomics
- CGMS 200   Global Management:
  Introduction to Global Management
- CITM 102   Business Technology Management:
  Business Information Systems I
- CLAW 122   Law: Business Law
- CMHR 405   Human Resources:
  Organizational Behaviour and Interpersonal Skills
- CMKT 100   Marketing: Principles of Marketing
- CQMS 102   Quantitative Methods:
  Business Statistics I

Note to registered certificate program students
Required
CGMS 200 replaces CMGT 200.

Distance Education
The following courses are available in a distance education format.
CACC 100   Accounting:
Introductory Financial Accounting
CACC 110   Accounting:
Financial Accounting for Accounting Majors
CECN 104   Economics:
Introductory Microeconomics
CGMS 200   Global Management:
Introduction to Global Management
CITM 102   Business Technology Management:
Business Information Systems I
CLAW 122   Law: Business Law
CMHR 405   Human Resources:
Organizational Behaviour and Interpersonal Skills
CMKT 100   Marketing: Principles of Marketing
CQMS 102   Quantitative Methods:
Business Statistics I

Business Management II

The Certificate in Business Management II will not be accepting any new registrants. The certificate has been discontinued effective Fall 2009. Students formally registered in the certificate prior to June 30, 2009, must complete the program requirements in effect at the time they registered. For further information, please contact the Business program area at 416.979.5035.

PROGRAMS

Canadian Social Work Practice

This certificate program is designed to enhance the employment and academic prospects of internationally educated social work professionals. Offered part-time over a 10-month period (beginning in the Fall term), the program includes courses, mentorship, and work experience. The certificate is open only to internationally educated professionals with social service experience approved through the Internationally Educated Social Work Professionals (IESW) Program admissions process.

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

Admission Requirements

A social work degree awarded outside of Canada and registration with the Ontario College of Social Workers and Social Service Workers (OCSWSSW) and;

A minimum of one year of paid accumulated employment in the social service field (abroad and/or in Canada)

OR

A social work degree awarded outside of Canada assessed as equivalent to a BSW or an MSW by the Canadian Association of Social Workers (CASW) and;

A minimum of one year of paid accumulated employment in the social service field (abroad and/or in Canada)

OR

A baccalaureate degree awarded outside of Canada (minimum of three years of university study) in the humanities or social sciences, and equivalent to a Canadian degree and;

A minimum of two years' paid accumulated employment in the social service field (abroad and/or in Canada)

In addition, all applicants must have the following:
- proof of English proficiency at the required level
- proof of Ontario residency
- proof of eligibility to work in Canada

Students seeking admission to this program are also required to complete an application form and participate in a pre-assessment. The form can be found on the Internationally Educated Social Work Professionals (IESW) Program website.

For further information about the program please visit the IESW Program website.

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 Information Nights

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 Information Nights for dates, times, and location.

Certificate Requirements

The successful completion of five 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
- CVSW 31A/B   Canadian Social Work Practice (IESW): Social Work Practice Seminar
- CVSW 900   PLACED: Foundations of Social Work
- CVSW 917   Canadian Social Work Practice (IESW): Special Topics I
- CVSW 918   Canadian Social Work Practice (IESW): Special Topics II

PROGRAMS

Electives (select one)*
- CVSW 35A/B Canadian Social Work Practice (IESW): Field Practicum
- CVSW 36A/B Canadian Social Work Practice (IESW): Field Practicum for Internationally Educated Social Workers

Note: Students admitted into the program who are already registered with the Ontario College of Social Workers and Social Service Workers (OCSWSSW) or who hold a degree assessed as equivalent by the Canadian Association of Social Workers (CASW) select CVSW 36A/B . Students who do not meet these qualifications must select CVSW 35A/B.

Note to registered certificate program students
Required
CVSW 900 replaces CVSW 130 and CVSW 131.
CVSW 31A/B replaces CSWP 31A/B.
CVSW 918 replaces CSWP 918.
Electives
CVSW 35A/B replaces CSWP 36A/B.

Chemical Analysis

The Certificate in Chemical Analysis will not be accepting any new registrants. The certificate has been discontinued effective Fall 2010. Students formally registered in the certificate prior to June 30, 2010, must complete the program requirements in effect at the time they registered. For further information, please contact the Academic Coordinator, Dr. Anne Johnson, at 416.979.5000, ext. 6348.

Computer Programming Applications

This program is designed for individuals who wish to work as application programmers in software engineering, database technology, and networking or related user support positions. It provides overview systems principles and client/server architecture that will enable individuals to perform system integrations and user help functions. It provides training in the most popular programming language (C) and the popular operating system (UNIX). The Certificate also permits specialization by students in three application areas: Software Engineering, Database Technology, and Networking.

Admission Requirements

OSSD with six OAC credits or Grade 12 U or M credits, or equivalent, or mature student status, or 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 Information Nights

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 Information Nights for dates, times, and location.

Certificate Requirements

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

For further information about the program, please contact the Academic Coordinator, Prof. Raj Nagendra, at 416.979.5000, ext. 7058, or attend a program information night.

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

Core Program, Required Courses, All Streams

Students may select only two of CCPS 305, CCPS 393, or CKCS 200. Students taking the Database Technology Networking or the Software Engineering Stream must take CCPS 305 and CCPS 393.

- CCPS 109   Computer Science: Computer Science I
- CCPS 209   Computer Science: Computer Science II
- CCPS 305   Computer Science: Data Structures
- CCPS 393   Computer Science: Introduction to C and UNIX

Computational Methods, Required Courses

- CKCS 210   Computer Science: Introduction to MatLab
- CKCS 220   Computer Science: Introduction to SPSS

Database Technology Stream, Required Courses

- CCPS 510   Computer Science: Database Systems I
- CCPS 610   Computer Science: Database Systems II

Geographic Information Systems, Required Courses (select two)

- CODG 132   Digital Geography: Customizing GIS Software: Applications Programming
- CODG 136   Digital Geography: Web Mapping
- CODG 211   Digital Geography: Advanced GIS Programming

Landscape Design (Dynascape), Required Courses
- CKLA 300   Landscape Design:
  Landscape Design Communications and Theory
- CKLA 440   Landscape Design:
  Digital Landscape Design

Networking Stream, Required Courses
- CCPS 590   Computer Science:
  Introduction to Operating Systems
- CCPS 706   Computer Science:
  Introduction to Data Communications

Software Engineering Stream, Required Courses
- CCPS 311   Computer Science: Object Oriented
  Programming and Design
- CCPS 613   Computer Science: Human-Computer
  Interaction

Project Management (MS Project), Required Courses
- CKPM 202   Project Management:
  Fundamentals of Project Management
- CKPM 207   Project Management:
  Project Management Systems

Note to registered certificate program students

This certificate has been revised effective July 1, 2010. Students who formally registered in the certificate prior to July 1, 2010, must complete the program requirements in effect at the time they registered.

Core Program, Required Courses

CKCS 200 added.

Four new streams added:
- Computational Methods
- Geographic Information Systems
- Landscape Design (Dynascape)
- Project Management (MS Project)
- Supplemental Information

This certificate program provides training in C, C++, and Object-Oriented Programming. It is important to realize that various courses require the successful completion of prerequisite courses. The recommended sequence of courses provides students with the best training and learning experience.

Distance Education

The following courses are available in a distance education format.

CODG 132   Digital Geography: Customizing GIS Software: Applications Programming

CODG 136   Digital Geography: Web Mapping

CKLA 300   Landscape Design: Landscape Design Communications and Theory

CKLA 440   Landscape Design: Digital Landscape Design

CKPM 202   Project Management: Fundamentals of Project Management

Criminal Justice and Criminology

For additional information about the program, please contact Tammy Landau, Academic Coordinator by email at tlandau@ryerson.ca (and CC: a2brinsm@ryerson.ca) or attend an Information Night.

Admission Requirements

OSSD with six Grade 12 U or M credits, or equivalent, or mature student status with relevant work experience, including policing, corrections, courts, social service agencies, security management services, or regulatory enforcement agencies 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 Information Nights

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 Information Nights for dates, times, and location.

Certificate Requirements

The successful completion of six single-term courses, with a cumulative grade point average of 2.00, 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

- CCRM 100   Criminal Justice and Criminology: Introduction to Canadian Criminal Justice
- CCRM 102   Criminal Justice and Criminology: Introduction to Crime and Justice

With the permission of the academic coordinator, students may choose courses from each of the certificate streams, as identified below: Group A and Group B.

Specialist Stream – Group A

- CCRM 300   Criminal Justice and Criminology: Policing in Canada
- CCRM 306   Criminal Justice and Criminology: Corrections in Canada
- CCRM 308   Criminal Justice and Criminology: Criminal Courts in Canada

Generalist Stream – Group B

- CCRM 202   Criminal Justice and Criminology: Victims and the Criminal Process
- CCRM 402   Criminal Justice and Criminology: Criminal Justice and Social Inequality
- CCRM 601   Criminal Justice and Criminology: Violence in Society

Electives – Both Streams (select one)

- CCRM 304   Criminal Justice and Criminology: Youth Justice in Canada
- CPHL 449   Philosophy: Issues in the Philosophy of Punishment
- CPHL 612   Philosophy: Philosophy of Law
- CPSY 300   Psychology: Psychology and Law
- CPSY 602   Psychology: Developmental Psychopathology
- CSOC 502   Sociology: Violence and the Family

Distance Education

The following courses are available in a distance education format.

CPSY 300   Psychology: Psychology and Law
CSOC 502   Sociology: Violence and the Family

Database Technology

The Certificate in Database Technology will not be accepting any new registrants. The certificate has been discontinued effective Fall 2010. Students formally registered in the certificate prior to June 30, 2010, must complete the program requirements in effect at the time they registered. For further information, please contact the Engineering, Architecture, and Science area at 416.979.5035.

PROGRAMS

Demographic Analysis

An understanding of demographics and demographic change is of increasing importance for professionals working in a wide variety of occupations in business, government, and not-for-profit sectors. This certificate offers opportunities to take a grounding in the principles and applications of demographic analysis and GIS applications in demography into the study of selected courses, with a concentration on applications used for business, commercial or public sector purposes, immigration and settlement studies and/or the economic impacts of demographic change. The final course will give students an opportunity to engage in "real-world" demographic analysis of issues such as school enrolments and closures, demand and supply of goods and services, retail sales potential, demand and supply of settlement services, social and assisted housing, and traffic in urban areas.

Academic Coordinator: Don Kendal: dkendal@geography.ryerson.ca (copying slaskin@ryerson.ca and a2brinsm@ryerson.ca).

Admission Requirements
OSSD with six Grade 12 U or M credits (English recommended) 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 Information Nights
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 Information Nights 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: CODA 100; CODA 110; Electives (three selections); and CODA 120.

Required Courses
- CODA 100 Demographic Analysis : Principles of Demographic Analysis
- CODA 110 Demographic Analysis : GIS Applications in Demography
- CODA 120 Demographic Analysis : Advanced Demographic Applications

Electives (select three)
- CECN 640 Economics: The Economics of Immigration
- CGEO 301 Geography: Marketing Geography
- CGEO 419 Geography: Retailing, GIS and Geodemographics
- CGEO 505 Geography: Regional Analysis of Canada
- CGEO 691 Geography: Canadian Immigration: Patterns and Place
- CGEO 803 Geography: Recreation and Tourism Analysis
- CINT 913 Interdisciplinary Studies: Issues of Migration
- CINT 914 Interdisciplinary Studies: Settlement Experiences
- CINT 915 Interdisciplinary Studies: Responses to Migration
- CODG 127 Digital Geography: Digital Geography Applications in Community and Social Services
- CPSY 620 Psychology: Psychology of Immigration
- CPSY 941 Psychology: Cross Cultural Psychology
- CSOC 474 Sociology: Immigration, Minorities and Citizenship

Design for Arts and Entertainment

Start your behind-the-scenes career with an interdisciplinary approach to design in the fields of arts, culture, and entertainment. This certificate will help you develop the skills needed to plan and create characters and environments for live stage, film, television, photography, and multimedia installations by exploring a curriculum that is relevant to the current and emerging practice of scenography and design.

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.

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

Students who have no previous drawing experience in these must successfully complete Drawing Fundamentals (CDID 803).

Program Information Nights
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 Information Nights for dates, times, and location.

Certificate Requirements
The successful completion of seven 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
Students are advised to take the courses in the following sequence:
Early Terms: CDID 150, CDID 170, CDMP 130
Mid Terms: CDMP 122, Cultural Elective, Technology Elective
Final Term: CDMP 123

Required Courses
- CDID 150   Interior Design: Design Theory
- CDID 170   Design for Arts and Entertainment: Drafting for Entertainment
- CDMP 122   Film Studies: Production Design for Film and Theatre
- CDMP 123   Film Studies: Art Direction for Film and Special Events
- CDMP 130   Design for Arts and Entertainment: History of Arts and Scenography

Cultural Electives (select one)
- CDFP 391   Photography: History of Photography I
- CDMP 120   Film Studies: Film History
- CDNM 111   New Media: Image Theory I: Image Analysis
- CENG 101   English Literature: Laughter and Tears: Comic and Tragic Modes
- CENG 201   English Literature: The Hero's Journey: Myth and Archetype
- CTHF 403   Theatre: Landmarks in Canadian Theatre
- Technology Electives (select one)
- CCMN 314   Communication: Professional Presentations
- CDFC 102   Fashion Coordination and Styling: Fashion Styling
- CDFP 385   Photography: Digital Tools I
- CDID 552   Lighting Design: Entertainment Lighting Design
- CDMP 114   Film Studies: Post-Production Sound

Note to registered certificate program students
Technology Electives
CDNM 116, CDNM 214, CDNM 318, and CDNM 541 deleted.
CDMP 114 added.

PROGRAMS

Design Management

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

The design industry generates billions of dollars in many sectors of the Canadian economy including manufacturing, construction, materials supply, transportation, retail, marketing, and consulting services. Graduates will be equipped to enter or progress within the growing numbers of organizations where design is considered to have strategic importance.

This multidisciplinary certificate program will provide graduates with the knowledge and skills required to be employed in those organizations engaged in the design field. It is aimed at those who may already be working in the design or business fields and/or those who have some design or business post-secondary education. It serves many different disciplines dedicated to design, including fashion, interior, industrial, graphic, landscape, architectural, engineering, and business interests.

Admission Requirements

OSSD with six Grade 12 U or M credits, or equivalent. Work experience and/or post-secondary education related to design or business is desirable.

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 Information Nights

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 Information Nights for dates, times, and location.

Certificate Requirements

The successful completion of eight courses (three required courses and five 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

CDDM 101
CDDM 102
Electives (five selections)
CDDM 103

Required Courses

- CDDM 101   Design Management: Introduction to Design Management
- CDDM 102   Design Management: Design Management II
- CDDM 103   Design Management: Design Management Project

Electives (select five)

- CCMN 314   Communication: Professional Presentations
- CDDM 104   Design Management: Design Awareness I
- CDDM 106   Design Management: Design Research
- CDGA 651   Graphic Communications: Graphic Communications Processes
- CDID 150   Interior Design: Design Theory
- CENT 500   Entrepreneurship: New Venture Startup
- CITM 100   Business Technology Management: Business and Information Systems
- CKPM 202   Project Management: Fundamentals of Project Management
- CMHR 405   Human Resources: Organizational Behaviour and Interpersonal Skills
- CMKT 100   Marketing: Principles of Marketing

Distance Education

The following courses are available in a distance education format.
CENT 500   Entrepreneurship:
New Venture Startup
CITM 100   Business Technology Management:
Business and Information Systems
CKPM 202   Project Management:
Fundamentals of Project Management
CMHR 405   Human Resources:
Organizational Behaviour and Interpersonal Skills
CMKT 100   Marketing: Principles of Marketing

Digital Architecture and Design

The Certificate in Digital Architecture and Design will not be accepting any new registrants. The certificate has been discontinued effective Fall 2009. Students formally registered in the certificate prior to June 30, 2009, must complete the program requirements in effect at the time they registered. For further information, please contact Yew-Thong Leong, the Academic Coordinator at 416.979.5000, ext. 6498.

eBusiness

Important Note: The Certificate in eBusiness is currently under review and will not be accepting new registrants at this time. For further information, please contact the Business area at 416.979.5035.

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

This certificate program prepares individuals for the rapidly emerging field of electronic commerce. eBusiness is transforming the way business is done. Largely enabled by the widespread availability and use of the Internet, eBusiness impacts virtually every business process, from back office operations to customer service, as well as many processes internal to an organization.

The certificate is coordinated by the Ted Rogers School of Information Technology Management; however, courses are delivered by all four schools within the Ted Rogers School of Management (Faculty of Business).

For detailed certificate and program information, please visit **www.ryerson.ca/ce/itm** or phone 416.979.5035.

Admission Requirements
This is an advanced certificate. Eligible applicants must have completed a Ryerson certificate in Accounting – Finance, Business Management, Information Systems Development (formerly Business Systems and Programming), Computer Science, Hospitality and Tourism Management, Information Systems Management, or Telecommunications Management, or an undergraduate degree, or a three-year college diploma, as well as completed the following courses or equivalents:
CACC 100 Accounting: Introductory Financial Accounting
CITM 100 Business Technology Management: Business and Information Systems
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.

Admission Application

Students seeking admission to this program are required to complete an application for pre-approval and submit it to the academic coordinator for the Certificate in eBusiness. To obtain an application, visit **www.ryerson.ca/ce** and click on Forms and Documents. The completed application, together with transcripts, may be presented to the academic coordinator at one of the Information Nights, or mailed to the address on the form.

Program Information Nights

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 Information Nights 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.

Credit Policies

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

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 Precursor Course (must be taken before the other required courses)

- CITM 350   Business Technology Management: Concepts of e-Business

Required Courses

- CGMS 550   Global Management: Business-to-Business e-Commerce
- CRMG 910   Retail Management: Multi-Channel Retailing

Electives (select a total of four courses)
Electives – Group A (select a minimum of two)

- CENT 526   Entrepreneurship: Entrepreneurial Behaviour and Strategy
- CHTI 746   Hospitality and Tourism: Destination Management Systems
- CITM 360   Business Technology Management: Establishing an eBusiness Operation
- CLAW 723   Law: Issues in Information Technology Law

Electives – Group B (select a maximum of two)

- CITM 200   Business Technology Management: Fundamentals of Programming
- CITM 750   Business Technology Management: IT Project Management

Note to registered certificate program students
Required

CGMS 550 replaces CMGT550.

Electives – Group B

CHTM 402 and CMKT 502 deleted.

Distance Education

The following courses are available in a distance education format.

CGMS 550   Global Management: Business-to-Business e-Commerce

CRMG 910   Retail Management: Multi-Channel Retailing

CITM 350   Business Technology Management: Concepts of e-Business

CHTI 746   Hospitality and Tourism: Destination Management Systems

CITM 750   Business Technology Management: IT Project Management

CACC 100   Accounting: Introductory Financial Accounting

CITM 100   Business Technology Management: Business and Information Systems

CMKT 100   Marketing: Principles of Marketing

Economics

The Certificate in Economics is designed for those without a post-secondary education in economics who wish to acquire knowledge of the discipline. A sound knowledge of economic principles is an important asset for people in a variety of fields of endeavour. The program will be of particular interest to those employed in business or government, and to secondary school teachers of economics.

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

Academic Coordinator: Dagmar Rajagopal.

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 Information Nights
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 Information Nights 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)
There are antirequisites to these courses. Students should consult the course descriptions before registering.
- CECN 321 Economics:
  Introduction to Law and Economics
- CECN 501 Economics: Industrial Organization
- CECN 502 Economics:
  Economics of Natural Resources
- CECN 506 Economics: Money and Banking
- CECN 510 Economics:
  Environmental Economics
- CECN 605 Economics: Labour Economics
- CECN 640 Economics:
  The Economics of Immigration
- CECN 703 Economics: Public Finance I
- CECN 710 Economics:
  Transportation Economics
- CECN 803 Economics: Public Finance II

Note: CECN 104 and CECN 204 give the student access to all the upper-level liberal studies courses in Economics as well as to the upper-level professionally related courses. CECN 110 and CECN 210 are not allowed as substitutes for CECN 104 and CECN 204 for Liberal Studies credit.

Note to registered certificate program students
Required
CECN 129 replaces CECN 420.
Electives
CECN 321 and CECN 640 added.

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

English as a Second/Additional Language

The Certificate in English as a Second/Additional Language offers a range of general and specialized English courses for professional, vocational, and academic purposes.

It is designed for people who wish to increase their career opportunities and to add to their qualifications. The certificate offers courses at the intermediate and advanced levels and is open to people whose first language is not English.

Individual Courses

Individual courses are designed to develop proficiency in English. Most courses involve readings from a selection of texts, as well as practice for improvement in spoken and written English. Small classes provide maximum individual attention. Students who do not wish to complete the certificate may take individual courses from the program for personal or professional need. An online placement test or interview to determine the appropriate level of study for each student is required for admission to these courses.

Admission Requirements

Admission to the certificate program is by written placement assessment and oral interview during which students' fluency, listening comprehension, communication strategies, and language abilities will be assessed. The course admission/placement assessment is necessary to determine the appropriate level of study for each student. Assessment will take place during Interview/Placement Assessment Nights. Students may also complete an online placement test for admission.

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 Information Nights

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 Information Nights for dates, times, and location.

PROGRAMS

Certificate Requirements

The successful completion of six credits, earned in one of the following ways:

- three courses from the First Level and three from the Second Level
- COEN 460 and COEN 461, in combination with one single-term course from the First Level and one single-term course from the Second Level (or two single-term courses from the Second Level)
- the completion of any combination of courses equaling six certificate credits as recommended and approved by the ESL/EAL program director

If at the commencement of the certificate the student is ranked at the Second Level in the placement assessment, the successful completion of four single-term courses from the Second Level is required for the certificate. 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).

First Level (Three courses required for students entering the Certificate at the First Level. For further information, see Certificate Requirements.)

- COEN 204   English as a Second/Additional Language: Intermediate Grammar
- COEN 294   English as a Second/Additional Language: Writing Accurately and Clearly
- COEN 295   English as a Second/Additional Language: Critical Reading and Effective Writing
- COEN 299   English as a Second/Additional Language: Effective Conversation Strategies
- COEN 301   English as a Second/Additional Language: Pronunciation
- COEN 460   Academic and Professional Skills - ESL/EAL: Upper Intensive

Second Level (Three courses required. Students ranked above the First Level in the placement assessment will require the completion of four Second Level courses.)

- CLNG 100   English as a Second/Additional Language: Language and Identity
- CLNG 200   English as a Second/Additional Language: Language and Public Life
- CLNG 300   English as a Second/Additional Language: Language: Spoken and Written
- COEN 296   English as a Second/Additional Language: Industry-Specific Writing for Professionals
- COEN 298   English as a Second/Additional Language: Scientific and Technical Writing
- COEN 304   English as a Second/Additional Language: Advanced Grammar
- COEN 306   English as a Second/Additional Language: ESL/EAL: Oral Communication for Professionals
- COEN 311   English as a Second/Additional Language: Integrated Skills I
- COEN 312   English as a Second/Additional Language: Integrated Skills II
- COEN 461   Academic and Professional Skills - ESL/EAL: Upper Advanced Intensive

Note to registered certificate program students

First Level
COEN 460 added.
COEN 311 deleted.
Second Level
COEN 298, COEN 311, COEN 312, CLNG 300, and COEN 461 added.

PROGRAMS

Distance Education

The following courses are available in a distance education format.

COEN 460   Academic and Professional Skills - ESL/EAL: Upper Intensive

CLNG 100   English as a Second/Additional Language: Language and Identity

CLNG 200   English as a Second/Additional Language: Language and Public Life

COEN 296   English as a Second/Additional Language: Industry-Specific Writing for Professionals

COEN 461   Academic and Professional Skills - ESL/EAL: Upper Advanced Intensive

English Literature and Popular Culture

This certificate in designed for students who appreciate the important ways in which English literature and culture enhance the quality of their lives and careers. Designed to allow students to tailor their studies to their own interests and aspirations, the program offers a dynamic grounding in the study of literature, writing, media, and popular culture. Graduates will have a strong knowledge base in contemporary and historical literature and culture that will prove useful in the experience, analysis, and production of cultural works.

Admission Requirements

OSSD with six Grade 12 U or M credits, including a credit in English with a minimum grade of 70 percent; 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 Information Nights

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 Information Nights 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.

PROGRAMS

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

- CENG 108   English Literature: The Nature of Narrative I
- CSSH 205   Social Sciences: Academic Writing and Research

Elective Streams (select a total of four courses)
Literature and Entertainment Stream (select a maximum of four)

- CENG 112   English Literature: Zap, Pow, Bang Pop Lit
- CENG 222   English Literature: Fairy Tales and Fantasies
- CENG 503   English Literature: Science Fiction
- CENG 510   English Literature: Gothic Horror
- CENG 705   English Literature: Reading Visual Cultures
- CENG 706   English Literature: Shakespeare and Performance
- CENG 888   English Literature: Televisual Texts and Contexts

Reading/Writing Culture Stream (select a maximum of four)

- CENG 200   English Literature: Writing as a Cultural Act
- CENG 511   English Literature: The Art of Writing Life
- CENG 520   English Literature: The Language of Persuasion
- CENG 610   English Literature: The Language of Love, Sex and Gender
- CENG 921   English Literature: Narrative in a Digital Age

Distance Education

The following courses are available in a distance education format.
CENG 112   English Literature: Zap, Pow, Bang Pop Lit

Environmental Engineering Science

This multidisciplinary program provides graduates with the broad knowledge base and wide range of skills they require as professionals in the environmental field. Students receive a grounding in air, water, and soil processes and contamination, biotechnology, instrumentation, and experiment design. The program also requires the student to develop proficiency in environmental management. Expertise is drawn from a number of degree programs including Applied Chemistry and Biology, Chemical Engineering, Civil Engineering, Mechanical Engineering, and Environmental Health.

Admission Requirements

Eligible applicants must meet one of the following criteria for acceptance in the program: undergraduate degree in one of the following programs: Science (e.g., Chemistry, Biology), Civil Engineering, Chemical Engineering, Mechanical Engineering, Mining, Metallurgical Science; or undergraduate degree in other programs (i.e., environment related); individuals without a degree but with an equivalent level of education and experience in environmental science or engineering may be admitted subject to the approval of the academic coordinator. Knowledge of basic chemistry at university level 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.

Admissions Process

Applicants must complete an application for pre-approval and be accepted before entering the program. Application forms and general information are available from The G. Raymond Chang School of Continuing Education office, or online at the Forms and Documents section, or call 416.979.5035, prior to the appropriate application deadlines (see Important Dates). Applicants wishing to enroll in the program must provide evidence of prior academic accomplishments or relevant work-related experience. The academic coordinator reserves the right to limit entry into the program. The coordinator may also request that applicants reinforce certain fundamental subjects, such as math and chemistry, prior to admission in the program. If you need further information on the program requirements please attend a program information night, or you may contact the Academic Coordinator, Dr. Vadim Bostan.

Program Information Nights

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 Information Nights 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

- CKES 102   Environmental Engineering Science: Hydrogeology Soil and Ground Water Science
- CKES 120   Environmental Engineering Science: Environmental and Atmospheric Processes
- CKES 200   Environmental Engineering Science: Environmental Law and Practice
- CKES 210   Environmental Engineering Science: Environmental Analysis

Electives (select two)

- CKES 110   Environmental Engineering Science: Environmental Biotechnology Waste Treatment and Remediation
- CKES 121   Environmental Engineering Science: Toxicology and Risk Assessment
- CKES 130   Environmental Engineering Science: Applied Ecology
- CKES 160   Environmental Engineering Science: Waste Management
- CKES 170   Environmental Engineering Science: Water Treatment
- CKES 180   Environmental Engineering Science: Site Assessment
- CKES 190 Environmental Engineering Science: Renewable Energy and Green Technology

Note to registered certificate program students

This certificate was revised in Fall 2010. Students who formally registered in the certificate prior to July 1, 2010, must complete the program requirements in effect at the time they registered. Some courses from the former certificate are no longer being offered; therefore students may be required to substitute new courses. For further information, please contact The Chang School at 416.979.5035 or ce@ryerson.ca.

Required
CKES 210 added.
CKES 120 replaces CKES 100 and 101.
Electives
CKES 103, CKES 140, and CKES 150 deleted.
CKES 170, CKES 180, and CKES 190 added.
CKES 160 replaces CKES 123 and CKES 125.

Environmental Public Health Leadership

The certificate in Environmental Public Health Leadership is currently under review and will not be accepting any new registrants at this time. For further information please contact The Chang School at 416.979.5035 or ce@ryerson.ca.

The certificate in Environmental Public Health Leadership was developed in cooperation with the Ryerson School of Occupational and Public Health. These unique offerings are intended for public health professionals across Canada that are seeking to upgrade their managerial skills or are working toward a supervisory or management position within their organization. The portfolio of courses will help participants gain knowledge on the most effective way to manage their public health workforce through effective program planning, practice and implementation, policy and administrative techniques. The curriculum has a strong focus on current public health issues.

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

Admission Requirements
Eligible applicants must have one of the following: a completed baccalaureate or masters degree in public health or a minimum of two years' education in public health, five years' experience in public health, university level courses in Canadian public health law, and 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.

Certificate Requirements
The successful completion of seven 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
- CHSM 408   Health Services Management: Program Planning and Evaluation
- CVPH 401   Environmental Public Health Leadership: Public Health Administration
- CVPH 402   Environmental Public Health Leadership: Public Health Practice
- CVPH 403   Environmental Public Health Leadership: Social Marketing
- CVPH 404   Environmental Public Health Leadership: Public Health Policy
- CVPH 405   Environmental Public Health Leadership: Public Health Leadership
- CVPH 406   Environmental Public Health Leadership: Current Topics in Public Health

PROGRAMS

Ethics

The Certificate in Ethics is designed to provide relevant, university-level education for individuals whose career paths require an ability to apply the principles of ethics in private and public sector organizations.

Individuals with knowledge of and practice in applied ethics have competencies to develop personal and organizational codes of ethics; to recognize, counsel, and train in analyzing and resolving ethical dilemmas; and to defend and monitor ethical decision making in their organizations.

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 Information Nights
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 Information Nights 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).

Recommended Sequence
Students are advised to take the courses in the following sequence: Electives – Group A (one selection); CPHL 334; Electives – Group B (three selections); and COPH 200.

Required Courses
- COPH 200   Philosophy: Ethics Capstone Course
- CPHL 334   Philosophy: Ethics in Professional Life

Electives – Group A (select one)
Open to all streams
- CPHL 503   Philosophy: Ancient and Modern Ethics

Environment Stream
- CPHL 500   Philosophy:
  Philosophy of the Natural Environment

Health Stream
- CPHL 302   Philosophy: Ethics and Health Care
- CPHL 444   Philosophy:
  Ethics in Health Services Management
- CPHL 507   Philosophy: Ethics and Disability
- CPHL 509   Philosophy: Bioethics

Human Rights and Administrative Justice Stream
- CPHL 400   Philosophy:
  Human Rights and Justice

Law Stream
- CPHL 449   Philosophy:
  Issues in the Philosophy of Punishment
- CPHL 612   Philosophy: Philosophy of Law

Media and Culture Stream
- CPHL 530   Philosophy: Media Ethics

Organizations and Professions Stream
- CPHL 307   Philosophy: Business Ethics
- CPHL 444   Philosophy:
  Ethics in Health Services Management
- CPHL 449   Philosophy:
  Issues in the Philosophy of Punishment
- CPHL 530   Philosophy: Media Ethics

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Electives – Group B (select three not previously taken in Electives – Group A)

Open to all Streams
- CPHL 503   Philosophy: Ancient and Modern Ethics

Environment Stream
- CECN 502   Economics: Economics of Natural Resources
- CECN 510   Economics: Environmental Economics
- CHST 562   History: Science, Corporations and the Environment
- CPHL 500   Philosophy: Philosophy of the Natural Environment
- CPSY 518   Psychology: Environmental Psychology

Health Stream
- CPHL 302   Philosophy: Ethics and Health Care
- CPHL 444   Philosophy: Ethics in Health Services Management
- CPHL 507   Philosophy: Ethics and Disability
- CPHL 509   Philosophy: Bioethics
- CPSY 124   Psychology: Social Psychology
- CPSY 706   Psychology: Models of Personal Growth

Human Rights and Administrative Justice Stream
- CHST 301   History: Human Rights and the Canadian State
- CHST 721   History: African-American History
- CINT 905   Interdisciplinary Studies: Conflict Resolution in Community Services
- CPHL 400   Philosophy: Human Rights and Justice
- CPOG 315   Politics: Equity and Human Rights
- CPOG 424   Politics: Human Rights and Global Politics
- CPPA 629   Public Administration: Administrative Law
- CSOC 609   Sociology: Women and Human Rights
- CSOC 705   Sociology: Law and Justice

Law Stream
- CCRM 322   Criminal Justice and Criminology: Ethics in Criminal Justice
- CECN 321   Economics: Introduction to Law and Economics
- CENG 520   English Literature: The Language of Persuasion
- CODG 130   Digital Geography: Legal and Ethical Issues in GIS and Digital Data
- CPHL 449   Philosophy: Issues in the Philosophy of Punishment
- CPPA 629   Public Administration: Administrative Law
- CSOC 705   Sociology: Law and Justice

Media and Culture Stream
- CENG 413   English Literature: Colonial and Postcolonial Literatures
- CENG 520   English Literature: The Language of Persuasion
- CENG 621   English Literature: Reading Gender in a Global Context
- CHST 602   History: The History of Modern Propaganda
- CPHL 401   Philosophy: Philosophy and Mass Culture
- CPHL 530   Philosophy: Media Ethics
- CPHL 603   Philosophy: Modern and Contemporary Ethics
- CPHL 621   Philosophy: Beyond the Western Academic Tradition

Organizations and Professions Stream
- CCRM 322   Criminal Justice and Criminology: Ethics in Criminal Justice
- CINT 905   Interdisciplinary Studies: Conflict Resolution in Community Services
- CODG 130   Digital Geography: Legal and Ethical Issues in GIS and Digital Data
- CPHL 307   Philosophy: Business Ethics
- CPHL 400   Philosophy: Human Rights and Justice
- CPHL 444   Philosophy: Ethics in Health Services Management
- CPHL 449   Philosophy: Issues in the Philosophy of Punishment
- CPHL 530   Philosophy: Media Ethics
- CPOG 315   Politics: Equity and Human Rights

Distance Education
The following courses are available in a distance education format.
CPHL 302   Philosophy: Ethics and Health Care
CINT 905   Interdisciplinary Studies: Conflict Resolution in Community Services
CPOG 315   Politics: Equity and Human Rights

Facility Management

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

The facility manager is responsible for the integration of the workplace with the people and work of the organization. This program will provide knowledge and analytical skills for those pursuing careers in this newly defined profession. It will be of interest to individuals at various stages of their career:

- those who are being prepared by an organization to assume a role in facility management
- those who are newly appointed to a facility management department
- those who wish to upgrade their credentials within the facility management department or to implement a career change

The design of the program is based on the guidelines for professional education developed by the International Facility Management Association.

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.

Program Information Nights

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 Information Nights 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

- CDFM 102 Facility Management:
  Facility Management Theory
- CDFM 103 Facility Management:
  Professional Practice I
- CDFM 104 Facility Management:
  Professional Practice II

Electives – Group A (select one)

- CCMN 114 Communication:
  Short Management Reports
- CCMN 314 Communication:
  Professional Presentations

Electives – Group B (select four)

Many of these electives have prerequisites which must be met by the student unless waived by the subject coordinator. Students may be allowed to substitute other appropriate elective courses with permission of the academic coordinator.

- CACC 100 Accounting:
  Introductory Financial Accounting
- CDFM 105 Facility Management:
  Office Facilities Space Management
- CDFM 203 Facility Management:
  Real Estate Planning and Development
- CDID 501 Lighting Design:
  Lighting Fundamentals

- CDID 504   Lighting Design:
  Lighting Energy Management
- CGMS 200   Global Management:
  Introduction to Global Management
- CGMS 401   Global Management:
  Operations Management
- CKAR 500   Architecture: Sustainable Buildings
- CKPM 202   Project Management:
  Fundamentals of Project Management
- CMHR 405   Human Resources:
  Organizational Behaviour and Interpersonal Skills
- CMKT 504   Marketing: Effective Persuasion
- COHS 208   Occupational Health:
  Occupational Health and Safety Law
- COHS 718   Occupational Health:
  Systems Management I

Note to registered certificate program students
Required
CDFM 102 replaces CIDE 311.
Electives – Group A
CCMN 432 deleted.
Electives – Group B
CDID 501, CDID 504, CKAR 500, and CKPM 202
added.
CDFM 202 deleted.
CGMS 200 replaces CMGT 200.
CGMS 401 replaces CMGT 401.

Distance Education
The following courses are available in a distance
education format.
CITM 102   Business Technology Management:
Business Information Systems I
CCMN 114   Communication:
Short Management Reports
CACC 100   Accounting:
Introductory Financial Accounting
CGMS 200   Global Management:
Introduction to Global Management
CKPM 202   Project Management:
Fundamentals of Project Management
CMHR 405   Human Resources:
Organizational Behaviour and Interpersonal Skills
COHS 208   Occupational Health:
Occupational Health and Safety Law
COHS 718   Occupational Health:
Systems Management I

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Family Supports

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

This certificate provides individuals with skills and
knowledge to support diverse families living in a
rapidly changing and complex society. It will appeal
to individuals who work with families in a wide
range of settings, such as family resource programs,
Ontario Early Years Centres, Best Start programs,
community agencies, schools, religious institutions,
and the workplace. Individuals who provide paid
or volunteer service in family resource and support
programs will have the opportunity to integrate
their current practice with theory related to family
supports, develop knowledge and skills needed for
exemplary practice, and explore issues of diversity
and inclusion as they work collaboratively to develop
high quality innovative programs.

Academic Coordinator: Catherine Moher,
416.979.5000, ext. 2535.

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

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

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

Program Information Nights
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 Information Nights
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.

Credits for Related Diplomas

To recognize the significance of the Early Childhood Diploma and other related Diplomas in Community Services sector within the framework of the Certificate in Family Supports, students who have completed an ECE and/or their related diplomas from an accredited academic institution within the past 10 years may be granted up to two elective credits toward the Certificate in Family Supports. In order to receive the appropriate credits, students must formally apply for transfer credits and must be registered in the certificate program prior to application. (For complete details see Transfer Credits.) Students who have additional questions are encouraged to contact the academic coordinator.

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

- CVFS 401   Family Supports:
  Contemporary Family Issues
- CVFS 403   Family Supports:
  Family Supports Theory and Practice
- CVFS 404   Family Supports:
  Program Planning and Evaluation

Electives – Group A (select two)

- CINT 920   Interdisciplinary Studies:
  Community Collaborations
- CVFS 400   Family Supports: Group Dynamics
  and Interpersonal Communication
- CVFS 402   Family Supports:
  Families Power and Social Change
- CVFS 406   Family Supports:
  Guiding Children's Development
- CVFS 407   Family Supports:
  Community Development
- CVFS 408   Family Supports: Practicum/Project

Electives – Group B (select one)

Students will choose one course from the following:
An additional course from Elective Group A above, excluding the two courses already completed.
One Interdisciplinary Studies (CINT) course.
One Nonprofit and Voluntary Sector Management (CINP) course.

With the submission of an approved Course Substitution/Directive Form signed by the academic coordinator, one course from Psychology, Sociology, Philosophy, or Politics courses, or equivalent.

With the submission of an approved Course Substitution/Directive Form signed by the academic coordinator, one professional course from Early Childhood Education, Nutrition, Child and Youth Care, Social Work, or Gerontology, or equivalent.

Note to registered certificate program students

Effective Fall 2007, the Certificate in Family Supports has been revised. Students who are formally registered in the certificate prior to July 1, 2007, must complete the requirements in effect at the time of their registration.

Electives – Group A
CVFS 406 replaces CCLD 103.
CINT 920 added.

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Distance Education

The following courses are available in a distance education format. Many courses from Electives – Group B are also offered via distance education; please check individual course descriptions.

CVFS 401   Family Supports:
Contemporary Family Issues
CVFS 403   Family Supports:
Family Supports Theory and Practice
CVFS 404   Family Supports:
Program Planning and Evaluation
CINT 920   Interdisciplinary Studies:
Community Collaborations
CVFS 402   Family Supports:
Families Power and Social Change
CVFS 406   Family Supports:
Guiding Children's Development
CVFS 408   Family Supports: Practicum/Project

Fashion Coordination and Styling

This certificate is designed to prepare professionally trained students for a career as fashion coordination and styling consultants. It will provide graduates with a solid knowledge foundation, with creative and technical expertise, and with sound problem-solving abilities. The program offers a stimulating study of art, design, and costume history and technology, which will prepare the graduate for career progression within this specialist field of fashion. The fashion industry has far-reaching influence and generates billions of dollars in many sectors of the Canadian economy. There are many avenues of opportunity for graduates in areas such as video and movie production, special events, trade shows and promotional exhibits, retail, television, magazines, corporate and/or individual consultation, and business ownership.

Admission Requirements

OSSD with six Grade 12 U or M credits, or equivalent, or mature student status with relevant 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 Information Nights

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 Information Nights for dates, times, and location.

Certificate Requirements

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

- CDFC 101   Fashion Coordination and Styling: Fashion Coordination
- CDFC 102   Fashion Coordination and Styling: Fashion Styling
- CDFC 103   Fashion Coordination and Styling: Design Fundamentals in Fashion
- CDFC 104   Fashion Coordination and Styling: Creating the Image

Electives (select four)

- CCMN 373   Communication: Fashion Communication: Professional Approaches
- CDFA 104   Fashion: Fashion Drawing I
- CDFA 105   Fashion: Fashion Drawing II
- CDFC 105   Fashion Coordination and Styling: Fashion Shows and Special Events
- CDFC 106   Fashion Coordination and Styling: Fashion, Culture, and Society
- CDFC 107   Fashion Coordination and Styling: Fashion Buying
- CDFC 200   Fashion Coordination and Styling: Fashion Photography
- CENT 500   Entrepreneurship: New Venture Startup
- CFSN 703   Fashion: Visual Merchandising and Display
- CMKT 100   Marketing: Principles of Marketing

Note to registered certificate program students
Electives
CCMN 373 replaces CCMN 103 and CCMN 202.
CMKT 502 deleted.

Distance Education

The following courses are available in a distance education format.
CENT 500   Entrepreneurship:
New Venture Startup
CMKT 100   Marketing: Principles of Marketing

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Film Studies

The Certificate in Film Studies provides a good basic grounding in the principles, contemporary theories, and techniques of the motion picture medium. Courses range from an introduction to basic filmmaking to specialized courses such as screen writing; cinematography and lighting workshops; directing screen performance; production design; sound design; and the business of developing, producing, and marketing motion pictures. It is an excellent starting point for people who want to pursue a career in the film industry or satisfy their curiosity about film and film production. The program will be of interest to various individuals:

- those working in the film industry who want to improve their qualifications
- those new to the industry, or others such as actors, who want to understand more fully all aspects of production
- those working in other fields who want to make a career change
- those working in allied fields who seek a better understanding of film production
- elementary and secondary school teachers who will apply the theoretical and practical knowledge they receive to their own teaching

The Chang School showcases the talents and recognizes the skill and dedication of continuing education film studies students at the annual Peter Gerretsen Film Awards.

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 Information Nights
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 Information Nights for dates, times, and location.

Certificate Requirements
The successful completion of eight courses (five required courses and three electives (or 126 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).

Note: Students who register in courses for which they do not have the stated prerequisites will be withdrawn from those courses, unless they have been given prior permission by the academic coordinator.

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

Required Courses
Please consult the course descriptions for prerequisites.

- CDMP 117   Film Studies: Film Technology I
- CDMP 118   Film Studies:
  Film and Sound Editing I
- CDMP 129   Film Studies:
  Motion Picture Production I
- CDMP 223   Film Studies: Film Technology II
- CDMP 229   Film Studies:
  Motion Picture Production II

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Electives (select three courses or 126 hours)
- CDMP 109   Business of Film:
  Business of Film - Producing
- CDMP 114   Film Studies: Post-Production Sound
- CDMP 119   Film Studies:
  Digital Film Production I
- CDMP 120   Film Studies: Film History
- CDMP 121   Film Studies: Film Theory
- CDMP 122   Film Studies:
  Production Design for Film and Theatre
- CDMP 123   Film Studies:
  Art Direction for Film and Special Events
- CDMP 125   Film Studies: Fiction Screenwriting
- CDMP 126   Film Studies:
  Non-Fiction Screenwriting
- CDMP 209   Business of Film:
  Business of Film - Development
- CDMP 231   Film Studies:
  Short Filmmaking: On Location
- CDMP 232   Film Studies:
  Documentary Filmmaking in Cuba
- CDMP 240   : Special Effects for Film
- CDMP 309   Business of Film:
  Feature Film/Video Distribution
- CDMP 409   Business of Film: Movie Marketing
- CDNM 113   New Media: Visual Studies I
- CFPN 32A/B   Film Studies:
  Directing Screen Performance
- CFPN 531   Film Studies:
  Cinematography and Lighting Design I

Note to registered certificate program students
This certificate has been revised effective July 1, 2010. Students who formally registered in the certificate prior to July 1, 2010, must complete the program requirements in effect at the time they registered.

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

Required
CDMP 329 deleted, thereby reducing the number of Required Courses to five.

Electives
CFPN 33A/B deleted.
CDMP 240 replaces CDMP 169.
Elective group has been reduced to three courses (or 126 hours).

Financial Management in Canada

The Certificate in Financial Management in Canada addresses the needs of internationally educated accounting and financial services professionals, who require a Canadian-specific knowledge base and professional communication competencies in order to market themselves effectively to employers and to practice confidently. Potential participants are typically adults in mid-career, who currently work in, or are hoping to enter the accounting profession or the financial industry in Canada and want to obtain a formal Canadian qualification in the field to advance their career.

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

Admission Requirements
A baccalaureate degree awarded outside of Canada in the area of business, accounting, or finance and a minimum of two years' paid accumulated employment in a relevant field (abroad and/or in Canada).

In addition, all applicants must have the following:
- proof of English proficiency at the required level
- proof of Ontario residency
- proof of eligibility to work in Canada

Students seeking admission to this program are also required to complete an application form and participate in a pre-assessment. The form can be found on the International Accounting and Finance Professionals (IAFP) website.

For further information about the program please visit the IAFP website.

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 Information Nights
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 Information Nights for dates, times, and location.

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Certificate Requirements

The successful completion of 6-10 courses, as approved by the program manager and outlined in the student's academic plan, according to the following course categories: Professional, Complementary, and Workplace Culture and Professional Communication. Students must achieve a cumulative grade point average of 2.00 or higher to graduate.

Note: Accreditation requirements vary among the accounting societies and professional associations, including minimum passing grades, and are available on the websites of respective professional bodies. In addition, for placements and internships, a higher grade may be 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).

This certificate will require the successful completion of 6-10 courses, as approved by the program manager and outlined in the student's academic plan, according to the following three categories:

- Professional Courses (select at least two, one of which must be CLAW 122, CZAC 122, or CZAF 122)
- These professional courses are designed to provide students with necessary skills in accounting, finance, and management.
- CACC 110   Accounting: Financial Accounting for Accounting Majors
- CACC 410   Accounting: Management Accounting for Accounting Majors

- CACC 414   Accounting: Intermediate Accounting I
- CACC 504   Accounting: Accounting Cases and Concepts I
- CACC 514   Accounting: Intermediate Accounting II
- CACC 522   Accounting: Taxation for Managers and Financial Planners
- CECN 104   Economics: Introductory Microeconomics
- CECN 204   Economics: Introductory Macroeconomics
- CECN 506   Economics: Money and Banking
- CFIN 300   Finance: Managerial Finance I
- CFIN 401   Finance: Managerial Finance II
- CFIN 501   Finance: Investment Analysis I
- CFIN 502   Finance: Personal Financial Planning
- CFIN 512   Finance: Risk Management and Insurance
- CFIN 601   Finance: Investment Analysis II
- CFIN 612   Finance: Retirement and Estate Planning
- CFIN 812   Finance: Advanced Personal Financial Planning
- CGMS 200   Global Management: Introduction to Global Management
- CITM 102   Business Technology Management: Business Information Systems I
- CITM 595   Business Technology Management: Auditing of Information Systems
- CITM 696   Business Technology Management: Accounting Information Systems
- CLAW 122   Law: Business Law
- CLAW 603   Law: Advanced Business Law
- CMHR 405   Human Resources: Organizational Behaviour and Interpersonal Skills
- CMHR 523   Human Resources: Human Resources Management
- CQMS 102   Quantitative Methods: Business Statistics I
- CQMS 202   Quantitative Methods: Business Statistics II
- CZAC 122   International Accounting Professionals (IAFP): Business Law
- CZAC 603   International Accounting Professionals (IAFP): Advanced Business Law
- CZAC 742   International Accounting Professionals (IAFP): Canadian Business Taxation I
- CZAC 842   International Accounting Professionals (IAFP): Canadian Business Taxation II
- CZAF 122   International Finance Professionals (IAFP): Business Law
- CZAF 522   International Finance Professionals (IAFP): Tax for Financial Planners and Managers

Notes:

Students may only take one of CACC 522 or CZAF 522.
Students may only take one of CACC 742 or CZAC 742. Those taking CACC 742 may opt to take supplemental course CACC 740.
Students may only take one of CACC 842 or CZAC 842. Those taking CACC 842 may opt to take supplemental course CACC 840.
Students may only take one of CLAW 122, CZAC 122, or CZAF 122. All students are required to take at least one of these three courses.
Students may only take one of CLAW 603 or CZAC 603. Those taking CLAW 603 may opt to take supplemental course CACC 640.

Complementary Courses (select at least two)

These courses are designed to assist students as they prepare for professional practice in a Canadian context

- CZAC 110   International Accounting Professionals (IAFP):
Career Development for Accounting Professionals
- CZAC 200   International Accounting Professionals (IAFP):
Prior Learning and Competency Portfolio
- CZAF 110   International Finance Professionals (IAFP):
Career Development for Financial Professionals
- CZAF 200   International Finance Professionals (IAFP): Prior Learning and Competency Portfolio

Notes:

Students may only take one of CZAC 110 or CZAF 110.
Students may only take one of CZAC 200 or CZAF 200.

Workplace Culture and Professional Communication Courses

The Canadian Workplace Communication for IPs will determine the appropriate CDCE and CCMN courses and the Director of English as an Additional Language (EAL) will determine the appropriate COEN and CLNG courses.

- CCMN 114   Communication: Short Management Reports
- CCMN 124   Communication: Communication in ITM
- CCMN 279   Communication: Introduction to Contemporary Business Comm
- CCMN 304   Communication: Career Advancement Communication
- CCMN 314   Communication: Professional Presentations
- CDCE 210   Workplace Communication in Canada (WCC): Introduction to Canadian Workplace Culture and Communication
- CDCE 220   Workplace Communication in Canada (WCC): Interpersonal Communication in the Workplace
- CDCE 240   Workplace Communication in Canada (WCC): Organizational Practices in Canada
- CDCE 310   Workplace Communication in Canada (WCC): Formal and Informal Communication in the Workplace
- CDCE 320   Workplace Communication in Canada (WCC): Advanced Customer Focused Applications
- CDCE 400   Workplace Communication in Canada (WCC): Exploring Leadership Skills
- CDCE 410   Workplace Communication in Canada (WCC): Canadian Workplace Governance
- CDCE 420   Workplace Communication in Canada (WCC): Strategic Working Relationships
- CDCE 430   Workplace Communication in Canada (WCC): Leadership in Client Relations
- CDCE 440   Workplace Communication in Canada (WCC): Team Building
- CDCE 910   Workplace Communication in Canada (WCC): Effective Oral Communication
- CDCE 920   Workplace Communication in Canada (WCC): Canadian Workplace Etiquette
- Any COEN and/or CLNG course(s), as deemed appropriate by the Director of EAL.

PROGRAMS

Financial Planning

This advanced certificate is designed to build on your background in accounting, finance, or management and may lead you to a professional career as a financial planner.

Successful completion of this certificate will allow you to write the national examination that leads to the Certified Financial Planner designation by the Financial Planners Standards Council. For details check their website at **www.cfp-ca.org**.

Academic Coordinator: Coleen Clark, 416.979.5000, ext. 7563.

Admission Requirements

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

This is an advanced certificate. Eligible applicants must have completed the Ryerson Certificate in Accounting – Finance, or an undergraduate degree, or a three-year college diploma, as well as all of the following courses or equivalents.

Note: Applicants should have completed either (CACC 100 and CACC 406) or (CACC 110 and CACC 410).
CACC 100   Accounting: Introductory Financial Accounting
CACC 110   Accounting: Financial Accounting for Accounting Majors
CACC 406   Accounting: Introductory Management Accounting
CACC 410   Accounting: Management Accounting for Accounting Majors
CACC 414   Accounting: Intermediate Accounting I
CECN 104   Economics: Introductory Microeconomics
CECN 204   Economics: Introductory Macroeconomics
CFIN 300   Finance: Managerial Finance I
CFIN 401   Finance: Managerial Finance II
CLAW 122   Law: Business Law
CQMS 102   Quantitative Methods: Business Statistics I
CQMS 202   Quantitative Methods: Business Statistics II

Admission Application

Students seeking admission to this program are required to complete an application for pre-approval and submit it to the academic coordinator for the Certificate in Financial Planning. To obtain an application visit **www.ryerson.ca/ce** and click on Forms and Documents, or call 416.979.5035. The completed application, together with transcripts, may be presented to the academic coordinator at one of the Information Nights, or mailed to the address on the form.

Program Information Nights

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 Information Nights 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
- CACC 522   Accounting:
  Taxation for Managers and Financial Planners
- CFIN 501   Finance: Investment Analysis I
- CFIN 502   Finance: Personal Financial Planning
- CFIN 512   Finance:
  Risk Management and Insurance
- CFIN 612   Finance:
  Retirement and Estate Planning
- CFIN 812   Finance:
  Advanced Personal Financial Planning

Note to registered certificate program students
CLAW 603 deleted.
CACC 522 replaces CACC 742 and CACC 842.
Note: This reduces the number of courses in the certificate from seven to six.

Distance Education
The following courses are available in a distance education format.
CFIN 502   Finance: Personal Financial Planning
CFIN 512   Finance:
Risk Management and Insurance
CFIN 612   Finance:
Retirement and Estate Planning
CACC 100   Accounting:
Introductory Financial Accounting
CACC 110   Accounting:
Financial Accounting for Accounting Majors
CACC 406   Accounting:
Introductory Management Accounting
CACC 410   Accounting:
Management Accounting for Accounting Majors
CACC 414   Accounting: Intermediate Accounting I
CECN 104   Economics:
Introductory Microeconomics
CECN 204   Economics:
Introductory Macroeconomics
CFIN 300   Finance: Managerial Finance I
CFIN 401   Finance: Managerial Finance II
CLAW 122   Law: Business Law
CQMS 102   Quantitative Methods: Business Statistics I

Food Security

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

The certificate focuses on how to meet the challenge of creating sustainable food systems based on social justice and democratic decision-making that will ensure people's right to food. As such, the programs serves anyone with a keen passion in food issues, environmental sustainability, human rights, alleviation of food insecurity, food-related health and education issues, and food policy. Students will go on to work in civil society organization and public sector agencies in Canada and worldwide addressing food issues and also engaging in the private sector to initiate its transformation to a more equitable and sustainable system of production, processing marketing.

Academic Coordinator: Reg Noble
For detailed certificate and program information, please visit **www.ryerson.ca/ce/foodsecurity**.

Admission Requirements
Undergraduate degree in any field, or approval of the academic coordinator and five years of professional experience in a field relevant to food security work, or approval of the academic coordinator and three years' Baccalaureate study with a clear academic standing (at least a C average or GPA of 2.00) 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 Assessment
If you wish to apply to register for the Certificate in Food Security, you must first contact the Academic Coordinator, Reg Noble, who will assess whether you are eligible and answer any questions you might have about the program. If you're interested in taking individual courses, Ryerson University's general eligibility rules apply.

Program Information Nights
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 Information Nights for dates, times, and location.

PROGRAMS

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

- 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

Electives (select three)

Students may select only one of CFND 401 or CSOC 808.

- CFND 401   Foods: Social and Cultural Dimensions of Food
- CFNF 100   Family Studies: Families and Health
- CFNN 111   Nutrition: Nutrition for Nursing Practice
- CFNN 404   Nutrition: Special Topics in Global Nutrition
- CFNP 400   Professional Practice: Reflective Practice
- CFNR 400   Research Methods: Independent Study
- CFNY 400   Food Security: Selected Topics in Food Security

- 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 111   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

PROGRAMS

Course Delivery Schedule

	Fall 2010	Winter 2011	Spring 2011
Required			
CFNY 403	I	I	I
CFNY 404	I		I
CFNY 405		I	
Electives			
CFND 401			
CFNN 111			I
CFNP 400			
CFNR 400			
CFNY 400			CI
CFNY 406			
CFNY 407			I
CFNY 408		I	
CFNY 409	I		
CINT 912			
CSOC 808			
CVFN 233			
CVFN 410	I		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 information.

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

Fundamentals of Interior Design

This certificate is intended for individuals interested in the fundamentals of interior design. Students should be aware that professional interior designers require membership in the Association of Registered Interior Designers of Ontario (visit the ARIDO website at **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. This certificate is designed for individuals with various goals:

- 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 certificates
- those who have a general interest in interior design

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 Information Nights
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 Information Nights 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.

PROGRAMS

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 156   Interior Design: Design Dynamics I: Portfolio 2
- CDID 157   Interior Design: Kitchen and Bathroom Design
- CIRC 103   Interior Design: Communications II
- 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.

Required

CDID 150 added.

CDID 153, CDID 155, CDID 156, CIRC 103, and CIRH 101 are now Electives.

Electives

CDID 157 added.

Liberal Studies Elective deleted.

Note: The above changes therefore reduce the number of courses in the certificate from nine to seven.

PROGRAMS

Fundraising Management

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

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 Information Nights
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 Information Nights 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

Geotechnology for Teachers

The Certificate in Geotechnology for Teachers will not be accepting any new registrants. The certificate has been discontinued effective Fall 2009. Students formally registered in the certificate prior to June 30, 2009, must complete the program requirements in effect at the time they registered. For further information, please contact Don Kendal, the Academic Coordinator at 416.979.5000, ext. 7149.

Gerontology

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

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, 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 Information Nights
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 Information Nights 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.

PROGRAMS

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

PROGRAMS

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 Information Nights

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 Information Nights 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

- 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
- 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
- CMKT 100   Marketing: Principles of Marketing

Note to registered certificate program students
CGRA 102 and CGRA 202 replace CGRA 012.
CGRA 103 and CGRA 203 replace CGRA 013.
CGRA 104 and CGRA 204 replace CGRA 014.

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 Services Management

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

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 Information Nights

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 Information Nights 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.

PROGRAMS

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 Contemporary Business Comm
- 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 Contemporary Business Comm
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

PROGRAMS

Hospitality and Tourism Management

The Certificate in Hospitality and Tourism Management will not be accepting any new registrants. The certificate has been discontinued. Students formally registered in the certificate prior to June 30, 2008, must complete the program requirements in effect at the time they registered. For further information, please contact the Academic Coordinator, Ruth Andrews, at 416.979.5000, ext. 5114.

Human Resources Management

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

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 Information Nights
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 Information Nights 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 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 1, 2007. Students who formally registered in the certificate prior to July 1, 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 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 Information Nights
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 Information Nights 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, rhonda.abrams@gmail.com

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 Information Nights
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 Information Nights 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 110 New Media: Image History I: Twentieth Century Art
- CDNM 111 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: Dagmar Rajagopal.

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 Information Nights
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 Information Nights 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.

PROGRAMS

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)

Students may only select one of CECN 230 or CMTH 240.

- 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
- CMTH 240 Mathematics: Calculus II

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 activities associated with information systems development form the basis for any IT solution. This certificate will be of interest to students who are already in the field of IT and who wish to gain additional knowledge in the area of information systems development, but it does not preclude those with no IT background who are interested in this area. It will also provide a solid grounding for those wishing to pursue professional certification.

For further information about the program, please contact The Chang School at 416.979.5035, or attend a program Information Night.

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 Information Nights

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 Information Nights 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

- CITM 200   Business Technology Management: Fundamentals of Programming
- CITM 305   Business Technology Management: Systems Analysis and Design
- CITM 430   Business Technology Management: System Design and Implementation
- CITM 445   Business Technology Management: Multimedia in Business
- CITM 500   Business Technology Management: Logical Database Analysis and Design
- CITM 540 Business technology Management: Web-based Applications Development

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 445 and CITM 540 added.

CITM 320, CITM 406, and CITM 605 deleted.

Electives

CITM 300, CITM 420 and CITM 525 deleted.

CITM 430 is now a Required Course.

Distance Education

The following courses are available in a distance education format.

CITM 305   Business Technology Management: Systems Analysis and Design

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 Information Night.

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 Information Nights

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 Information Nights 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.

PROGRAMS

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
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

PROGRAMS

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.

Students may specialize in International Economics and Finance or in eBusiness and International Management, or develop a general perspective with any three electives.

Academic Coordinator: Carlyle Farrell.

Admission Requirements

This is an advanced certificate. Eligible applicants must have completed a Ryerson certificate in Accounting – Finance, Business Communication, Business Management, Hospitality and Tourism Management, Purchasing and Supply Chain Management, Retail and Services Management, or an undergraduate degree, or a three-year college diploma, as well as the following courses or equivalents:

- CECN 104 Economics:
  Introductory Microeconomics
- CECN 204 Economics:
  Introductory Macroeconomics
- CGMS 401 Global Management:
  Operations Management
- CMHR 405 Human Resources:
  Organizational Behaviour and Interpersonal Skills
- 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.

Admission Application

Students seeking admission to this program are required to complete an application and submit it to the academic coordinator for the Certificate in International Business. To obtain an application for pre-approval, visit the Forms and Documents section, or call 416.979.5035. The completed application, together with transcripts, may be presented to the academic coordinator at one of the information nights, or mailed to the address on the form.

Program Information Nights

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 Information Nights for dates, times, and location.

Certificate Requirements

The successful completion of nine 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

- CCMN 443 Communication:
  Contemporary Intercultural Communication
- CGMS 522 Global Management:
  International Marketing
- CGMS 723 Global Management:
  International Trade
- CLAW 724 International Business Law:
  Legal Aspects of International Business
- CMHR 700 Human Resources: Cross-Cultural Dimensions of Organizational Behaviour
- CZIB 100 International Business:
  Practicum in International Business

Electives (select three)
- CECN 503 Economics: Economic Development
- CECN 606 Economics:
  International Monetary Economics
- CECN 607 Economics:
  Issues in the International Economy
- CECN 609 Economics:
  European Economic Development
- CECN 707 Economics:
  Economics of International Trade
- CECN 721 Economics:
  International Financial Markets
- CECN 802 Economics:
  The Economies of East Asia
- CECN 821 Economics: Country Risk Analysis
- CFIN 621 Finance: International Finance
- CGMS 550 Global Management:
  Business-to-Business e-Commerce
- CGMS 724 Global Management:
  Management of International Enterprise
- CHST 500 History:
  Modern International Relations
- CITM 350 Business Technology Management:
  Concepts of e-Business
- CLAW 723 Law:
  Issues in Information Technology Law
- CPHL 307 Philosophy: Business Ethics
- CPOL 607 Politics:
  Technology and Globalization

Note: Students may need additional prerequisites for some elective courses.

Specialization
For specialization, the electives may be grouped as follows:

International Economics and Finance: Select three from CECN 503, CECN 606, CECN 607, CECN 707, CECN 802, CECN 821, and CFIN 621.

eBusiness and International Management: Select three from CITM 350, CLAW 723, CGMS 550, CMKT 530, CPHL 307, CPOL 607, and CRMG 910.

Note to registered certificate program students
Electives
CMGT 804, CMKT 530, and CRMG 910 deleted.
CFIN 621 replaces CIBS 621.
CGMS 401 replaces CGMT 401.
CGMS 724 replaces CIBS 724.
CGMS 550 replaces CMGT 550.

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

International Economics

The advanced Certificate in International Economics will not be accepting any new registrants. The certificate has been discontinued effective Fall 2008. Students formally registered in the certificate prior to June 30, 2008, must complete the program requirements in effect at the time they registered. For further information, please contact the academic coordinator at 416.979.5000, ext. 7320.

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: Dagmar Rajagopal.

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 Information Nights
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 Information Nights 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.

PROGRAMS

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

Landscape Design

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 Information Nights

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 Information Nights for dates, times, and location.

Note: The Information Night 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 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.

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 2010	Winter 2011	Spring 2011
Required			
CKLA 300		C	I
CKLA 310	I		C
CKLA 320	C	I	
CKLA 330	C	I	
Electives			
CKLA 400	I		C
CKLA 410	I	C	
CKLA 420	I	C	
CKLA 430	C		
CKLA 440		I	C
CKLA 450	C		

C = Classroom
I = Distance: Internet

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.

PROGRAMS

Program Information Nights

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 Information Nights 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

PROGRAMS

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 Information Nights
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 Information Nights 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: Dagmar Rajagopal.

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 Information Nights
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 Information Nights 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

PROGRAMS

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**.

Advisory Board for This Certificate:

- Doug Bennet, Publisher, Masthead (chair)
- Phil Boyd, President, Canadian Business Press
- Anne Gibson, Editor, Where Toronto
- Mark Jamison, CEO, Magazines Canada
- Doug Knight, President, St. Joseph Media
- Todd Latham, President, We Communications and Publisher, ReNew Canada
- Colleen Moloney, Director, The CM Group
- Charles Oberdorf, Academic Coordinator

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 Information Nights

All applicants are encouraged to attend an Information Night, 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 Information Nights 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).

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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 Information Night. 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 Information Nights

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 Information Nights 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
- CDRT 204 Broadcasting and Media Production: Writing for Electronic Media

Note to registered certificate program students
Required Courses
CBDC 940 deleted.
Note: This reduces the number of courses in the certificate from eight to seven.

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 Information Nights
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 Information Nights 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 1, 2009. Students who are formally registered in the certificate prior to July 1, 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 606 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

PROGRAMS

For the most current information, see our website at **www.ryerson.ca/ce.**

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: Dagmar Rajagopal.

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 Information Nights
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 Information Nights 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: TBA (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 Information Nights
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 Information Nights 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, 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 406   Music: Chinese Instrumental Music
- CMUS 505   Music: Popular Music and Culture
- CMUS 506   Music: Chinese Music Studies

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, 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 Information Nights

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 Information Nights 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

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: Diversity and Conflict Resolution
- CINP 915 Nonprofit: Financial Management
- CINP 916 Nonprofit: NGOs and World Governance

Course Delivery Schedule

	2010/2011			2011/2012			2012/2013			2013/2014			2014/2015		
	F	W	S	F	W	S	F	W	S	F	W	S	F	W	S
Required															
CINP 900		C/D			C/D			C/D			C/D			C/D	
CINP 901	C/D			C/D			C/D			C/D			C/D		
CINP 902	H	D		H	D			D		H	D		H	D	
CINP 920		H/D			D			H/D			H/D			H/D	
Electives															
CINP 910			H	D	H			H/D							
CINP 911				C/D				H/D	H/D		H/D				
CINP 912	C	D		C	D		H	D	D	H			D	H	
CINP 913			H/D		C	H/D					H/D				H/D
CINP 914	H/D			H/D				H/D			H/D			H/D	
CINP 915		H	D				H				D	H		D	H
CINP 916		C/D			C/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.

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 Information Nights
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 Information Nights 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 322 Public Administration: Canadian Public Administration I

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

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   Public Administration:
Canadian Public Administration I

Pattern Drafting

The certificate in Pattern Drafting will not be accepting any new registrants. The certificate has been discontinued. Students who formally registered in the certificate prior to July 1, 2007, must complete their program within the required time span. For further information please contact The Chang School at 416.979.5035 or ce@ryerson.ca.

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 Information Nights
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 Information Nights 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

PROGRAMS

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

Note to registered certificate program students
This certificate has been revised effective July 1, 2010. Students who formally registered in the certificate prior to July 1, 2010, must complete the program requirements in effect at the time they registered.
Electives
CDFP 397 and CNPF 549 deleted.
CDFP 403, CDFP 404, and CDFP 405 added.
Note: Elective group has been reduced to five courses, thereby reducing the number of courses in 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 at one of the Information Nights, or mailed to the address on the form.

Program Information Nights
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 Information Nights for dates, times, and location.

PROGRAMS

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 and Disease
- CPLN 303   Physical Activity:
  Exercise Science and Physiology

Note to registered certificate program students

This program 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

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 Information Nights
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 Information Nights 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 Information Nights
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 Information Nights 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 401, the successful completion of four single-term courses is required for the certificate. All four courses must be at an advanced level (CSPN 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.

PROGRAMS

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 information night.

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 Information Nights

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 Information Nights 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.

PROGRAMS

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 110 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
- Project and Performance Management
- Partnership Management

42-Hour Courses
- CKPP 310: Program and Portfolio Management Research
- CKPP 320: Program and Portfolio Management Practicum

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 Information Nights

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 Information Nights 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)

- 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
- 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.

Electives

CITM 724 and CPLE 895 deleted.

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 Information Nights

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 Information Nights for dates, times, and location.

PSYCHOLOGY

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

PROGRAMS

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.

PROGRAMS

Program Information Nights

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 Information Nights 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
- CPOG 315 Politics: Equity and Human Rights
- CPOL 332 Politics:
  Power and Influence in Canada
- CPPA 322 Public Administration:
  Canadian Public Administration I
- CPPA 422 Public Administration:
  Canadian Public Administration II

Required Group 1 (select one)
- CPOG 310 Politics: Ontario Politics
- CPOG 440 Politics:
  Aboriginal Governance/Justice
- CPOL 122 Politics: Local Government in Canada

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
Required Courses
CPOG 310 replaces CPPA 522.
CPOG 315 replaces CPPA 521.
CPOG 440 replaces CPOL 440.
CPOL 332 replaces CPOG 210 and CPOL 302.

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.
CPOG 315 Politics: Equity and Human Rights
CPOL 332 Politics:
Power and Influence in Canada
CPPA 322 Public Administration:
Canadian Public Administration I
CPPA 422 Public Administration:
Canadian Public Administration II
CPOL 122 Politics: Local Government in Canada

PROGRAMS

Public Administration and Governance – Level 2 (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

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 Information Nights

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 Information Nights 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

- CPOG 230   Politics: Research and Statistics
- CPOG 319   Politics:
  The Politics of Work and Labour
- CPPA 525   Public Administration:
  Theories of the State
- CPPA 623   Public Administration: Public Policy

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.

PROGRAMS

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
Required Courses
CPOG 319 replaces CPPA 533.

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 at one of the Information Nights, or mailed to the address on the form.

Program Information Nights
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 Information Nights 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   Public Administration: Public Sector Leadership
- CPPA 604   Public Administration: Issues in Public Administration
- CPPA 623   Public Administration: Public Policy

Electives (select three)

- CPPA 600   Public Administration: Financial Management
- CPPA 601   Public Administration: Collaborative Governance
- CPPA 602   Public Administration: Program Planning and Evaluation
- CPPA 603   Public Administration: Comparative Public Policy
- CPPA 624   Public Administration: Theories of Bureaucracy
- CPPA 629   Public Administration: Administrative Law
- CPPA 650   Public Administration: Intergovernmental Relations

Public/Private Management and Governance

Ryerson University has created this certificate for the benefit of those who are currently working at the middle and upper managerial levels in hybrid organizations or aspire to rise to those levels. The curriculum of this certificate will also satisfy the needs of members of Boards of Government for continuing development. Furthermore, it will be of interest to managers of private enterprises who interact with one of the hybrid organizations of the broader public sector and wish to learn more about the policy goals and governance of such organizations.

Admission Requirements

This is an advanced certificate. Eligible applicants must have completed an undergraduate degree and have related professional experience.

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

Program Information Nights

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 Information Nights for dates, times, and location.

Certificate Requirements

The successful completion of eight credits (two required courses and 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.

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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: CIMG 800; 21-hour courses (eight selections); and CIMG 900.

Required Courses

42-Hour Courses
- CIMG 800 Management and Governance: Management and Governance of Organizations
- CIMG 900 Management and Governance: Applied Governance and Management

21-Hour Courses
- CIMG 810 Management and Governance: Governance: Role and Functions of Boards
- CIMG 820 Management and Governance: Partnership Management
- CIMG 830 Management and Governance: Managing Public/Private Cultures
- CIMG 840 Management and Governance: Accounting and Financial Management
- CIMG 850 Management and Governance: Law, Regulations, and Ethics
- CIMG 860 Management and Governance: Project and Performance Management
- CIMG 870 Management and Governance: Leadership, Managing Change, and Human Resources
- CIMG 880 Management and Governance: Communication and Reputation Management

Note: A student may be granted an exemption from taking one or two of the above 21-hour courses and will need to complete one or both of the Special Topics courses below:
- CIMG 890 Management and Governance: Special Topics: Seminar
- CIMG 895 Management and Governance: Special Topics: Directed Readings

Public Relations

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

This program provides a curriculum that is relevant to the current and emerging practice of public relations in order to equip students with the skills necessary to perform the public relations function.

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 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.

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 Information Nights

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 Information Nights 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).

Recommended Sequence

CDPR 201
CDRP 111
CDPR 104
CDPR 106
CDPR 113
CDPR 114
CDPR 105
CDPR 107

Required Courses

- 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 111   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

Note to registered certificate program students

CDPR 109, CDPR 112, CDPR 202, and CDRT 204 deleted.
CDPR 113 and CDPR 114 added.
Note: This reduces the number of courses in the certificate from nine to eight.

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 111   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
Instructors may include:
- Sharon Bailey, production director, House of Anansi Press
- Don Bastian, publishing consultant
- Camilla Blakeley, editor/writer, Blakeley Words and Pictures
- Elizabeth d'Anjou, freelance editor
- Kathryn J. Dean, editor/writer, Kathryn J. Dean Communications Ltd.
- Hadley Dyer, author, editor
- Stephanie Fysh, freelance editor
- Joy Gugeler, vice president, Publishing, NOWPublic.com
- Sam Hiyate, literary agent
- Brad Horning, program manager, Integrated Publishing Systems, Cengage Learning
- Greg Ioannou, president, Colborne Communications
- David Jolliffe, director, Integrated Media Solutions, Pearson Canada
- Ray Lee, president and publisher, Master Point Press
- Anthony E. Luengo, publishing consultant
- Siobhan McMenemy, acquisitions editor, University of Toronto Press
- Peter Moskos, freelance writer, editor, and trainer
- Mary Newberry, freelance editor and indexer
- Mike O'Connor, president, Insomniac Press
- Brian O'Donnell, director, Business Development, Access Copyright
- Melissa Pitts, assistant director, University of British Columbia Press
- Nita Pronovost, senior editor, Doubleday Canada
- Jacqueline Hope Raynor, production manager, Firefly Books
- Craig Saunders, freelance editor

- Rosemary Shipton, Shipton, McDougall Maude Associates
- Susan Shipton, sales and rights manager, Annick Press
- Kimberly Sullivan, production manager, StayWell Health
- Meg Taylor, freelance editor
- Rebecca Vogan, freelance editor
- David Ward, production manager, McClelland & Stewart
- Janice Weaver, freelance editor
- Cara Yarzab, publisher, McGraw-Hill Ryerson
- Noelle Zitzer, managing editor, HarperCollins Canada

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

Internships
The following industry internships are among those that may be open to students in the program.
- Anne McDermid & Associates
- Between the Lines Publishing
- Book and Periodical Council
- BookNet Canada
- The Bukowski Agency
- Canadian Children's Book Centre
- Canadian Scholars' Press
- Colborne Communications
- Descant magazine
- Doubleday Canada
- The Dundurn Group
- Edmond Montgomery
- Firefly Books
- Fitzhenry & Whiteside
- Harlequin Enterprises
- HarperCollins Canada
- House of Anansi Press
- Irwin Law
- jack digital productions
- John Wiley & Sons
- Kate Walker & Co.
- Key Porter
- Kids Can Press
- Knopf Canada
- Longwoods Publishing

PROGRAMS

- James Lorimer & Co.
- Madison Press Books
- McArthur & Company
- McClelland & Stewart
- McGraw-Hill Ryerson
- Novalis Publishing
- Oxford University Press
- Pearson Technology Group Canada
- Penguin Canada
- Quill & Quire
- Random House Canada
- Second Story Press
- Shore Publishing
- Sumach Press
- Thomas Allen Publishers
- Tinlids, Inc.
- Tundra Books
- University of Toronto Press

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 Information Nights

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 Information Nights 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 110   Publishing:
  Publicity for Book Publishers
- CDPB 201   Publishing:
  Literary Rights Management

- CDPB 202   Publishing:
  Substantive and Line 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 Line Editing
CDPB 802   Publishing:
Publishing in the Electronic Age

Quality Assurance

The Certificate in Quality Assurance will not be accepting any new registrants. The certificate has been discontinued effective Fall 2009. Students formally registered in the certificate prior to June 30, 2009, must complete the program requirements in effect at the time they registered. For further information, please contact Robert Russell, the Academic Coordinator at r3russel@ryerson.ca.

PROGRAMS

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: Dagmar Rajagopal.

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 Information Nights
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 Information Nights 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
- 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

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.

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

The Certificate in Residential Care for Children and Youth is for front-line care workers currently employed in a residential care facility. You will build your understanding of the legal, ethical, and performance dimensions of the role of a residential care worker, and your relationship to other care givers and those in their care. You will also gain a sound conceptual base, practical experiences relevant to working in the residential field, and opportunities for further education and professional advancement.

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

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 Information Nights
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 Information Nights 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

PROGRAMS

Retail and Services Management

The Certificate in Retail and Services Management will not be accepting any new registrants. The certificate has been discontinued effective Fall 2009. Students formally registered in the certificate prior to June 30, 2009, must complete the program requirements in effect at the time they registered. For further information, please contact the Academic Coordinator, Sean Sedlezky, at 416.979.5000, ext. 7931.

Visit **www.ryerson.ca/ce/retail** for information on the retail management degree program and course series.

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 at one of the Information Nights, or mailed to the address on the form.

Program Information Nights
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 Information Nights 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.

PROGRAMS

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

For the most current information, see our website at **www.ryerson.ca/ce.**

Note to registered certificate program students
Effective Fall 2010, the Certificate in Marketing Management will be 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 1W1.

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 the issues society faces today. The third required course is a unique capstone course where learners have the opportunity to integrate 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
OR
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 Information Nights
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 Information Nights 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

PROGRAMS

Theory and Principles (2 Required Courses) CKSS 102	»»	CKSS 100 Fundamentals of Sustainability I	»»	CKSS 101 Fundamentals of Sustainability II

	Natural Environment	Urban Environment	Socioeconomics of Sustainability
Elective Streams (3 Courses) Specialized content relevant to student's professional goals	CKES 160 Waste Management	CKAR 500 Sustainable Buildings	CECN 502 Economics and Natural Resources
	CKES 180 Site Assessment	CKAR 601 Building Science for Architectural Presentation and Conservation	CECN 510 Environmental Economics
	CKES 190 Renewable Energy and Green Technology	CKAR 610 Architectural and Presentation Techniques	CFNY 404 Food Policy and Programs for Food Security
	CKES 210 Applied Environmental Analysis	CKLA 400 Ecology and Sustainable Landscapes	CFNY 407 Community Development and Food Security
		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)	»»	CKSS 102 Capstone Experiential Learning Course

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 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 Information Night.

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 Information Nights
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 Information Nights 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

PROGRAMS

Television Production Fundamentals

Students will receive a basic hands-on understanding of the production tools used across the full range of the television industry. This will be supported by theoretical material that provides both a context and a critical lens through which they may view their production work. In the final courses in this certificate, students are challenged to develop more sophisticated communications in their production elements.

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 Information Night. Incomplete applications will not be considered.

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

Program Information Nights
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 Information Nights 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
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 201 Broadcasting and Media Production: Media Production II - TV Studio and EFP
- CBDC 202 Broadcasting and Media Production: Media Writing II - TV Studio and EFP
- CBDC 211 Broadcasting and Media Production: Media Tech Theory II -TV Studio and EFP
- CDRT 308 Broadcasting and Media Production: Production - TV Studio and EFP

Electives, Group 1 (select one)
- CBDC 955 Broadcasting and Media Production: Sports Broadcasting
- CBDC 956 Broadcasting and Media Production: Children's Television Production
- CBDC 957 Broadcasting and Media Production: Documentary Production

Electives, Group 2 (select one)
- CBDC 402 Broadcasting and Media Production: Management and Regulation
- CBDC 910 Broadcasting and Media Production: Production Management

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.

For more information, please visit **www.ryerson.ca/ce/bsa** or contact Christine Brown, Academic Coordinator, Business Systems Analysis at c12brown@ryerson.ca.

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

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

PROGRAMS

Information Technology Studies

.NET Application Developer

C# and VB.NET are object-oriented programming languages developed by Microsoft that use 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 general information, contact ce@ryerson.ca or 416.979.5035. Further admission information in Internet Technologies can be requested by contacting Janet Shusterman at itstudies@ryerson.ca or 416.979.5000, ext. 7907.

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

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 courses in the following sequence: CXEC 300 or CXEC 302; CXEC 309; CXEC 304 or 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: Designing and Implementing Databases with Microsoft SQL Server Enterprise Edition
- 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 general information, contact ce@ryerson.ca or 416.979.5035. Further admission information in Networking Technologies can be requested by contacting Janet Shusterman at itstudies@ryerson.ca or 416.979.5000, ext. 7907.

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

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)

PROGRAMS

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 general information, contact ce@ryerson.ca or 416.979.5035. Further admission information in Networking Technologies can be requested by contacting 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 courses in the following sequence: CXIT 401; CXIT 421; and 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)

Note: This course series has been revised effective July 1, 2009. For further information about this course series, please visit www.ryerson.ca/ce/ITS.

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), database application programming, EJB (Enterprise JavaBeans), Struts, Spring Framework, JSF (JavaServer Faces), and XML. This program may assist you with your preparation for various Sun certifications.

This course series is appropriate for learners with a programming background.

For general information, contact ce@ryerson.ca or 416.979.5035. Further admission information in Internet Technologies can be requested by contacting Janet Shusterman at itstudies@ryerson.ca or 416.979.5000, ext. 7907.

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

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 courses in the following sequence: CXEC 320; CXEC 312; CXEC 313; CXEC 322 or CXEC 326

Required Courses
Students may only select one of CXEC 322 or CXEC 326.
- 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 320   Java EE Solution Developer: Java Advanced
- CXEC 322   Java EE Solution Developer: Developing Advanced Web Applications Using Java
- CXEC 326   Java EE Solution Developer: XML and Web Services for the Java Platform

Supplementary Courses
- CXEC 328   Java EE Solution Developer: Android Wireless Application Development

PROGRAMS

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 general information, contact ce@ryerson.ca or 416.979.5035. Further admission information in Internet Technologies can be requested by contacting 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 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 685   Website Design and Development: PHP/My SQL Web Design Fundamentals
- CXCP 695   Website Design and Development: eCommerce Design with PHP/MySQL
- CXCP 184   Website Design and Development: Adobe Photoshop

Note: This course series has been revised effective July 1, 2009. For further information about this course series, please visit www.ryerson.ca/ce/ITS.

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**.

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**.

The International Midwifery Pre-registration Program (IMPP)

The International Midwifery Pre-registration Program (IMPP) is a nine-month bridging program. It is your route to registration and practice in Ontario. It provides internationally educated midwives with the following:

- knowledge and skills assessment and enhancement
- orientation to midwifery practice in Ontario
- a three-month clinical placement with competency assessment
- online components
- six-month fast-track option
- preparation for the National Midwifery Registration Exam

The IMPP is intended for experienced international midwives, fluent in English, who have practiced 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.

If you are an internationally educated midwife, you must take this bridging program in order to be registered to practice in Ontario. 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**.

PROGRAMS