

Programs

The G. Raymond Chang School of Continuing Education offers an extensive range of career-oriented programs in various areas of interest.

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- CS Contemporary Global Challenges and Opportunities for Change 147
- C Financial Management in Canada 72
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- CS International Accounting and Finance Professionals (IAFP) 149
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- C English as a Second/Additional Language 58
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Law and Government

- C Criminal Justice and Criminology 49
- C Ethics 64
- CS Political Management 154
- C Public Administration and Governance – Level 1 (PADP) 128
- C Public Administration and Governance – Level 2 (PADP) 129
- C Public Administration and Leadership 131
- C Sustainability Management 144

Liberal Arts

- C Criminal Justice and Criminology 49
- C English Literature and Popular Culture 60
- C Ethics 64
- C Global Diasporas, Transnationalism, and Migration Cities 81
- CS Immigration and Settlement Studies 150
- C Mental Health and Addictions 106
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- CS Political Management 154
- C Proficiency in French 119
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- C Psychology 126
- C Public Administration and Governance – Level 1 (PADP) 128
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- C Public Administration and Leadership 131
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Programs for 50+

- CS Caring Clown 154

Science and Engineering

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- C Architecture 36
- C Architecture, Advanced 37
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- C Computer Programming Applications 47
- C Computer Security and Digital Forensics 48
- CS Contemporary Global Challenges and Opportunities for Change 147
- C Demographic Analysis 50
- C Disaster and Emergency Management 54
- C Energy Management and Innovation 57
- C Environmental Engineering Science 62
- C Facility Management 66
- C Financial Mathematics Modeling 74
- C Infrastructure Asset Management and Renewal 95
- C Internationally Educated Engineers Qualification Bridging (IEEQB) Program 97
- C Laboratory Practices Management 98
- C Landscape Design 100
- C Mining Management 108
- C Program and Portfolio Management 121
- C Project Management 123
- C Project Management Bridging Certificate for Internationally Educated Professionals 125
- C Robotics and Embedded Systems 140
- C Sustainability Management 144

Certificate Programs

Accounting – Finance

Note: All 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 the CA, CGA, and CMA information found in the online version of this certificate at www.ryerson.ca/ce.

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 Open House

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

Certificate Requirements

The successful completion of eight courses, with a cumulative grade point average of 2.00 or higher, is required for the certificate. 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 Information 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 Information Technology Management:
Business Information Systems I
CLAW 122 Law: Business Law
CQMS 102 Quantitative Methods:
Business Statistics I

Advanced Safety Management

Note: All 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 Open House

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

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

Advancing the AODA: Principles and Practices of Accessibility

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

This certificate combines theory with the development and application of skills for students who wish to make contributions to policy and organizational change in areas impacted by the Accessibility for Ontarians with Disabilities Act (AODA). Potential students include those in occupations that address or that should be addressing accessibility issues in public sector, private and not-for-profit sector organizations with obligations under the AODA.

Admission Requirements

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

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

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Recommended Sequence

Students are advised to take the courses in the following sequence: CDST 501, CINT 902, or CSWP 921; CDST 506; Electives - Group A (one selection); and Electives - Group B (two selections); and CVDS 200 (required capstone course).

Required Courses

Students may select only one of CDST 501, CINT 902, or CSWP 921.

- CDST 501 Disability Studies:
Rethinking Disability
- CDST 506 Disability Studies:
Making Ontario Accessible
- CINT 902 Interdisciplinary Studies:
Disability Issues
- CSWP 921 Social Work:
Disability Issues and Social Work Practice
- CVDS 200 Disability Studies:
AODA Capstone Synthesis

Electives (select a total of three courses)

Electives – Group A (select one)

Ethics and Social Justice Stream

- CDST 500 Disability Studies:
A History of Madness
- CDST 504 Disability Studies:
Mad People's History
- CDST 604 Disability Studies:
Current Topics in Disability II
- CDST 725 Disability Studies:
The Politics and Practice of Interventions
- CPHL 302 Philosophy: Ethics and Health Care
- CPHL 400 Philosophy:
Human Rights and Justice
- CPHL 507 Philosophy: Ethics and Disability
- CPHL 509 Philosophy: Bioethics

Organizational Behaviour and Change Management Stream

- CDST 727 Disability Studies:
Leadership for Social Action
- CINT 913 Nonprofit:
Leading Through Change
- CINT 907 Interdisciplinary Studies:
Team Work for Community Services
- CMHR 405 Human Resources:
Organizational Behaviour and Interpersonal Skills
- CMHR 650 Human Resources:
Management of Change

Public Policy and Law Stream

- CDST 502 Disability Studies:
Disability and the State
- CDST 603 Disability Studies:
Disability and The Law
- CPHL 602 Philosophy:
Health Care and Distributive Justice
- CSWP 402 Social Work:
Social Policy and Social Inclusion

Electives – Group B (select two)

Customer Service Stream

- CCLD 445 Early Childhood Education:
Inclusion and Consultation
- CDST 726 Disability Studies:
Leadership in Human Services
- CGER 298 Gerontology:
Ability, Disability and Aging

Employment Stream

- CMHR 600 Human Resources:
Diversity and Equity in the Workplace
- COHS 477 Occupational Health:
Integrated Disability Management
- CSOC 472 Sociology:
Sociology of Work and Occupations

Information and Communication Stream

- CDST 525 Disability Studies: Rethinking Images
of Difference
- CDST 614 Disability Studies: Community
Access and Technology
- CINT 921 Interdisciplinary Studies: Writing for
Disability Activism

Note to registered certificate program students
Electives – Group A (Ethics and Social Justice Stream)

CDST 604 and CDST 725 added.

Electives – Group B (Information and Communication Stream)

CINT 921 replaces CDST 505.

CSOC 525 deleted.

CDST 525 added.

Distance Education

The following courses are available in a distance education format.

CCLD 445 Early Childhood Education:

Inclusion and Consultation

CDST 502 Disability Studies:

Disability and the State

CDST 504 Disability Studies:

Mad People’s History

CDST 506 Disability Studies:

Making Ontario Accessible

CDST 525 Disability Studies:

Rethinking Images of Difference

CDST 614 Disability Studies:

Community Access and Technology

CDST 725 Disability Studies:

The Politics and Practice of Interventions

CGER 298 Gerontology:

Ability, Disability and Aging

CINP 913 Nonprofit: Leading Through Change

CINT 902 Interdisciplinary Studies:

Disability Issues

CINT 907 Interdisciplinary Studies:

Team Work for Community Services

CMHR 405 Human Resources:

Organizational Behaviour and Interpersonal Skills

CMHR 600 Human Resources:

Diversity and Equity in the Workplace

CMHR 650 Human Resources:

Management of Change

PROGRAMS



Elective Streams Group A <i>(Choose one course)</i>	Ethics and Social Justice Stream	Organizational Behaviour and Change Management Stream	Public Policy and Law Stream
	CDST 500 A History of Madness	CDST 727 Leadership for Social Action	CDST 502 Disability and the State
	CDST 504 Mad People’s History	CNIP 913 Leading Through Change	CDST 603 Disability and the Law
	CDST 604 Current Topics in Disability II	CNIT 907 Team Work for Community Services	CPHL 602 Health Care and Distributive Justice
	CPHL 302 Ethics and Health Care	CMHR 405 Organizational Behaviour and Interpersonal Skills	CSWP 402 Social Policy and Social Inclusion
	CPHL 400 Human Rights and Justice	CMHR 650 Management of Change	
	CPHL 507 Ethics and Disability		
CPHL 509 Bioethics			

Elective Streams Group B <i>(Choose two courses)</i>	Customer Service Stream	Employment Stream	Information and Communication Stream
	CCLD 445 Inclusion and Consultation	CMHR 600 Diversity and equity in the Workplace	CDST 525 Rethinking Images of Difference
	CDST 726 Leadership in Human Services	COHS 477 Integrated Disability Management	CDST 614 Community Access and Technology
CGER 298 Ability, Disability and Aging	CSOC 472 Sociology of Work and Occupations	CINT 921 Writing for Disability Activism	



COHS 477 Occupational Health:
Integrated Disability Management
CPHL 302 Philosophy: Ethics and Health Care
CPHL 509 Philosophy: Bioethics

Applied Digital Geography and GIS

Note: All 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: Joe Aversa,
certificates@geography.ryerson.ca

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 Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a Program Open House. Please see Open House 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).

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

Applied Digital Geography and GIS, Advanced

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: Joe Aversa, certificates@geography.ryerson.ca

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 Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Required Courses – First Level (select four or five)

Students may select one course 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

Architectural Preservation and Conservation

This is a highly technical certificate program consisting of six 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 Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a Program Open House. Please see Open House 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.

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

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 eight to six, 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 six-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 Anne Grady, Program Coordinator) 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

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 Courses

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 Open House

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

Certificate Requirements

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

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 eight to six, 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 six-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 Anne Grady, Program Coordinator) 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 Courses

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

Architecture, Advanced

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 Probationary 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 Open House

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

Certificate Requirements

The successful completion of six courses, with a cumulative grade point average of 2.00, 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 Open House.

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 eight to six, 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 six-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 Anne Grady, Program Coordinator) 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 at 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

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

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

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

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 Open House

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

Certificate Requirements

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

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 Information 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 Courses

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.

- CCMN 313 Communication: Organizational Problem Solving and Report Writing
- CGMS 200 Global Management: Introduction to Global Management
- CHTH 102 Hospitality and Tourism: Service and Professionalism
- CITM 102 Information Technology Management: Business Information Systems I
- CMKT 500 Marketing: Marketing Research
- CMKT 723 Marketing: Marketing in the Service Industry
- CQMS 102 Quantitative Methods: Business Statistics I

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 CDCM 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 Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a Program Open House. Please see Open House 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 Professional Communication
- 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 447 Communication: Communication and Law
- CCMN 448 Communication: Introduction to Visual Communication
- CDCM 300 Communication: Communicating in Virtual Environments
- CDCM 415 Communication: Promotional Communications
- CFRE 502 French: Advanced Business French I

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 Courses

CMHR 405 deleted.
CCMN 443 added.

Electives

CCMN 443 is now a Required course.
CDCM 415 replaces CCMN 415.
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 Professional Communication
- 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. For detailed certificate and program information, please visit www.ryerson.ca/ce/french.

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 Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a Program Open House. Please see Open House 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 five)

- CFRE 502 French: Advanced Business French I
- CFRE 507 French: English-French Translation I
- CFRE 602 French: Advanced Business French II
- CFRE 607 French: English-French Translation II
- CFRE 707 French: Introduction to French English Translation

Electives (select one)

- CFRE 515 French: Introduction to Business French
- CFRE 610 French: Effective Writing II
- CFRE 706 French: The Life and Times of the French Language

Note to registered certificate program students

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

Required Courses

CFRE 515, CFRE 610, and CFRE 706 are now Electives.

Electives

Elective group added; students select one course.

Business Management

Note: All 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 Open House

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

Certificate Requirements

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

Students may select one of CITM 100 or CITM 102. Students planning to pursue the **Information Technology** major must enroll in CITM 100.

- 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 100 Information Technology Management: Foundations of Information Systems
- CITM 102 Information Technology Management: Business Information Systems I
- CLAW 122 Law: Business Law
- CMHR 523 Human Resources: Human Resources Management
- CMKT 100 Marketing: Principles of Marketing
- CQMS 102 Quantitative Methods: Business Statistics I

Note to registered certificate program students

Required Courses

CACC 110 and CITM 100 added.
CGMS 200 replaces CMGT 200.
CMHR 523 replaces CMHR 405.

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 Information Technology Management: Business Information Systems I
- CLAW 122 Law: Business Law
- CMHR 523 Human Resources: Human Resources Management
- CMKT 100 Marketing: Principles of Marketing
- CQMS 102 Quantitative Methods: Business Statistics I

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 Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a Program Open House. Please see Open House 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 Canadian Social Work Practice (IESW): Foundations of Social Work
- CVSW 917 Canadian Social Work Practice (IESW): Special Topics I
- CVSW 918 Canadian Social Work Practice (IESW): Special Topics II

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 Courses

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.

Community Engagement, Leadership, and Development

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

This interdisciplinary certificate will be of interest to community practitioners in organizations in the public and nonprofit sectors, across diverse fields of service such as social services, education, labour, health, housing, policing, and transportation. Courses focus on the acquisition of the knowledge and skills required to engage community members effectively in planning, problem solving, and decision-making processes that improve conditions and address issues related to the social, political and/or cultural wellbeing of civic and community life.

Admission Requirements

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

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

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Recommended Sequence

Students are advised to take the courses in the following sequence:

Required Courses

CVSW 200; two or all three of C1NP 913, CVSW 210, and/or CVSW 220.

Electives

One selection if all four of the Required Courses above have been completed OR two selections if only three of the Required Courses above have been completed.

Required Capstone Course

CVSW 300

Required Courses

Students may select two or three of C1NP 913, CVSW 210, and/or CVSW 220.

- C1NP 913 Nonprofit: Leading Through Change
- CVSW 200 Social Work: Community Engagement Foundations
- CVSW 210 Social Work: Community Engagement Practices
- CVSW 220 Social Work: Engaging Diverse Communities
- CVSW 300 Social Work: Community Engagement Capstone

Electives (select one or two)

- CCMN 313 Communication: Organizational Problem Solving and Report Writing
- CCMN 314 Communication: Professional Presentations
- CCMN 414 Communication: Interpersonal Communication in Management
- CCMN 443 Communication: Contemporary Intercultural Communication
- CCRM 322 Criminal Justice and Criminology: Ethics in Criminal Justice
- CCRM 402 Criminal Justice and Criminology: Criminal Justice and Social Inequality
- CDST 501 Disability Studies: Rethinking Disability
- CDST 502 Disability Studies: Disability and the State
- CDST 613 Disability Studies: Strategies for Community Building
- CFNY 407 Food Security: Community Development and Food Security
- CINT 900 Interdisciplinary Studies: Program Planning and Evaluation Strategies
- CINT 904 Interdisciplinary Studies: Health Promotion and Community Development
- CINT 905 Interdisciplinary Studies: Conflict Resolution in Community Services
- CINT 907 Interdisciplinary Studies: Team Work for Community Services
- CINT 910 Interdisciplinary Studies: First Nations Issues
- CINT 912 Interdisciplinary Studies: Community Development: International Field Experience
- CINT 914 Interdisciplinary Studies: Settlement Experiences
- CINT 916 Interdisciplinary Studies: Introduction to Fundraising
- CINT 917 Interdisciplinary Studies: Urban Community Development
- CINT 920 Interdisciplinary Studies: Community Collaborations
- CKPM 202 Project Management: Fundamentals of Project Management

- CODG 127 Digital Geography: Digital Geography Applications in Community and Social Services
- CPHL 334 Philosophy: Ethics in Professional Life
- CPLE 745 Planning: Selected Topics in Planning
- CPSY 808 Psychology: Community Psychology
- CSOC 500 Sociology: Youth and Society
- CSOC 609 Sociology: Women and Human Rights
- CSOC 705 Sociology: Law and Justice
- CSWP 302 Social Work: Social Policy: Welfare and Programs
- CSWP 335 Social Work: Power, Resistance and Change
- CSWP 402 Social Work: Social Policy and Social Inclusion
- CVFS 401 Family Supports: Contemporary Family Issues
- CVFS 403 Family Supports: Family Supports Theory and Practice

Distance Education

The following courses are available in a distance education format.

- CCMN 313 Communication: Organizational Problem Solving and Report Writing
- CDST 502 Disability Studies: Disability and the State
- CFNY 407 Food Security: Community Development and Food Security
- C1NP 913 Nonprofit: Leading Through Change
- CINT 900 Interdisciplinary Studies: Program Planning and Evaluation Strategies
- CINT 904 Interdisciplinary Studies: Health Promotion and Community Development
- CINT 905 Interdisciplinary Studies: Conflict Resolution in Community Services
- CINT 907 Interdisciplinary Studies: Team Work for Community Services
- CINT 914 Interdisciplinary Studies: Settlement Experiences
- CINT 916 Interdisciplinary Studies: Introduction to Fundraising
- CINT 920 Interdisciplinary Studies: Community Collaborations
- CKPM 202 Project Management: Fundamentals of Project Management
- CVFS 401 Family Supports: Contemporary Family Issues
- CVFS 403 Family Supports: Family Supports Theory and Practice
- CVSW 200 Social Work: Community Engagement Foundations
- CVSW 210 Social Work: Community Engagement Practices

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 languages (Java and C) and the popular operating system (UNIX). The Certificate also permits specialization by students in several application areas: Software Engineering, Database Technology, Networking, Project Management, GIS, and Landscape Design.

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 Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a Program Open House. Please see Open House 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, Dr. Sadeghian, at 416.979.5000, ext. 6961, or attend a Program Open House.

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
- CKCS 200 Computer Science: Introduction to Computer Applications

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: Computer Networks I

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.

- CKLA 300 Landscape Design: Landscape Design Communications and Theory
- CKPM 202 Project Management: Fundamentals of Project Management
- CKPM 207 Project Management: Project Management Systems
- CODG 132 Digital Geography: Customizing GIS Software: Applications Programming
- CODG 136 Digital Geography: Web Mapping

Computer Security and Digital Forensics

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

This certificate program is designed to develop the functional competencies required to work in the cutting-edge and rapidly evolving field of computer security. Whether collecting digital evidence after a computer security breach, recovering information after a hardware failure, analyzing a system to detect system compromises, or filling system security gaps through “legal” hacking, individuals will develop the core knowledge, functional competencies, and hands-on best practices required in the computer security and digital forensics industry. A combination of technical and investigative practice provides individuals with the competitive expertise to succeed professionally in this high-demand field.

Computer security and digital forensics specialists play a vital role in the digital protection of private business enterprises and public institutions. This certificate will be of interest to both career entry individuals and career changers seeking to achieve career advancement, portability, and longevity goals.

Admission Requirements

OSSD with six Grade 12 U or M credits, including a Grade 12 U course in English and with a minimum grade point average 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 Open House

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

Certificate Requirements

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

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course (see

also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

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

Required Sequence

Students are required to take the courses in the following sequence:

- CKDF 110
- CKDF 120
- CKDF 130
- CKDF 140
- CZLW 120
- CKDF 150

Required Courses

- CKDF 110 Digital Forensics: Introduction to Computer Forensic Methodology
- CKDF 120 Digital Forensics: Computer Cryptography and Digital Steganography
- CKDF 130 Digital Forensics: Intrusion Detection/Forensic Systems
- CKDF 140 Digital Forensics: Security Architecture and Design
- CKDF 150 Digital Forensics: Digital Forensics Investigation
- CZLW 120 Law: Law for Forensics Professionals

Distance Education

The following courses are available in a distance education format.

- CKDF 110 Digital Forensics: Introduction to Computer Forensic Methodology
- CKDF 120 Digital Forensics: Computer Cryptography and Digital Steganography
- CKDF 130 Digital Forensics: Intrusion Detection/Forensic Systems
- CKDF 140 Digital Forensics: Security Architecture and Design
- CKDF 150 Digital Forensics: Digital Forensics Investigation
- CZLW 120 Law: Law for Forensics Professionals

Criminal Justice and Criminology

The Certificate in Criminal Justice and Criminology will provide interdisciplinary knowledge and critical thinking skills with respect to social and criminal justice, including public and private security, policing, the administration of criminal justice, and corrections and community engagement. This program is relevant to administrators and managers in a wide variety of public and private sectors who are seeking career entry, career portability, and career advancement in fields related to criminal justice.

Academic Coordinator: Professor Landau, tlandau@ryerson.ca

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 Open House

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

Certificate Requirements

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

Generalist Stream (select three)

- CCRM 200 Criminal Justice and Criminology: Criminal Law
- CCRM 202 Criminal Justice and Criminology: Victims and the Criminal Process
- 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
- CCRM 402 Criminal Justice and Criminology: Criminal Justice and Social Inequality

Electives (select one)

- CCRM 304 Criminal Justice and Criminology: Youth Justice in Canada
- CGEO 581 Geography: GIS, Geographic Data and Mapping
- 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 500 Sociology: Youth and Society
- CSOC 502 Sociology: Violence and the Family

Note to registered certificate program students

The Specialist and Generalist Streams have been merged into a single Generalist Stream.

Generalist Stream

CCRM 200 replaces CCRM 601.

Electives

CGEO 581 added.

Distance Education

The following courses are available in a distance education format.

- CPHL 612 Philosophy: Philosophy of Law
- CPSY 300 Psychology: Psychology and Law
- CSOC 502 Sociology: Violence and the Family

Database and Knowledge Management

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

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.

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 enrollments 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: Joe Aversa,
certificates@geography.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 Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Recommended Sequence

Students are advised to take the courses in the following sequence: 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 206 Geography: Regions, Nations and the Global Community
- 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
- CPLE 725 Planning: Multicultural Cities and Public Policies
- CPSY 620 Psychology: Psychology of Immigration
- CPSY 941 Psychology: Cross Cultural Psychology
- CSOC 474 Sociology: Immigration, Minorities and Citizenship

Note to registered certificate program students

Electives

CPLE 745 deleted.

CGEO 206 and CPLE 725 added.

Distance Education

The following courses are available in a distance education format.

- CINT 913 Interdisciplinary Studies: Issues of Migration
- CINT 914 Interdisciplinary Studies: Settlement Experiences
- CINT 915 Interdisciplinary Studies: Responses to Migration
- CODA 100 Demographic Analysis: Principles of Demographic Analysis
- CODA 110 Demographic Analysis: GIS Applications in Demography

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.

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

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

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a Program Open House. Please see Open House 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)

- CDFC 106 Fashion Coordination and Styling: Fashion, Culture, and Society
- CDFP 391 Photography: History of Photography I
- CDMP 120 Film Studies: Film History
- CENG 101 English Literature: Laughter and Tears: Comedy and Tragedy
- CMPC 203 New Media: Image Theory I: Image Analysis
- CMUS 110 Music: Music and Film

Technology Electives (select one)

- CCMN 314 Communication: Professional Presentations
- CDFA 104 Fashion: Fashion Drawing I
- CDID 552 Lighting Design: Entertainment Lighting Design
- CDMP 114 Film Studies: Post-Production Sound
- CFPN 531 Film Studies: Cinematography and Lighting Design I

Note to registered certificate program students**Cultural Electives**

CMPC 203 replaces CDNM 111.
 CENG 201 and CTHF 403 deleted.
 CDFC 106 and CMUS 110 added.

Technology Electives

CDFC 102, CDFP 385, CDNM 116, CDNM 214, CDNM 318, and CDNM 541 deleted.
 CDFA 104, CDMP 114, and CFPN 531 added.

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 Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a Program Open House. Please see Open House 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 Information 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
- CKPM 202 Project Management: Fundamentals of Project Management
- CMHR 405 Human Resources: Organizational Behaviour and Interpersonal Skills
- CMKT 100 Marketing: Principles of Marketing

Disaster and Emergency Management

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

This certificate, offered in class and online, is designed for individuals seeking professional development in disaster management. With the increasing number of natural disasters and emergencies around the world, graduates will be equipped with the knowledge required to effectively manage a crisis.

Admission Requirements

OSSD with six Grade 12 U, including Grade 12 U or M credits, or equivalent, or mature student status. Undergraduate students wishing to pursue a continuing education certificate program should be aware of possible restrictions; please refer to Curriculum Advising for complete details.

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Required Courses

Students may select only one of CKDM 100 or CKDM 105 or CKDM 110.

- CKDM 100 Disaster Emergency Management: Principles and Practices of Emergency Management
- CKDM 105 Disaster Emergency Management: Project Management in Disaster Recovery
- CKDM 110 Disaster Emergency Management: Law of Disaster and Emergency Management
- CKDM 120 Disaster Emergency Management: Emergency Operations and Incident Management
- CKDM 130 Disaster Emergency Management: Critical Analysis of Operations
- CKDM 140 Disaster Emergency Management: Emergency Management Planning
- CKDM 150 Disaster Emergency Management: Risk Management
- CKDM 160 Disaster Emergency Management: Emerging Issues

Note to registered certificate program students
CKDM 105 added.

Distance Education

The following courses are available in a distance education format.

- CKDM 100 Disaster Emergency Management: Principles and Practices of Emergency Management
 CKDM 110 Disaster Emergency Management: Law of Disaster and Emergency Management
 CKDM 120 Disaster Emergency Management: Emergency Operations and Incident Management
 CKDM 130 Disaster Emergency Management: Critical Analysis of Operations
 CKDM 140 Disaster Emergency Management: Emergency Management Planning
 CKDM 150 Disaster Emergency Management: Risk Management
 CKDM 160 Disaster Emergency Management: Emerging Issues

eBusiness

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

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: Michael Jolly,
 mjolly@ryerson.ca

Admission Requirements

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

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

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Required Courses

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

Electives (select three)

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 Courses

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

Economics and Finance

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

This certificate will help students to qualify as Chartered Financial Analysts, Certified Financial Analysts, and/or Certified Financial Planners, to name only three examples of professional designations. The program will also help to prepare students for the Canadian Securities Examination.

Admission Requirements

OSSD with six Grade 12 U, including Grade 12 U credits in English and Mathematics (one of which must be Advanced Functions, Calculus and Vectors, or Data Management), or M credits with a minimum grade of 70 percent; or equivalent; or mature student status. As well, student must have completed the following courses or equivalents:

- CACC 110 Accounting: Financial Accounting for Accounting Majors
- CMTM 189 Mathematics: Introduction to Mathematics for Economics

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

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Required Courses

- CECN 104 Economics: Introductory Microeconomics
- CECN 129 Economics: Statistics for Economics I
- CECN 204 Economics: Introductory Macroeconomics
- CFIN 300 Finance: Managerial Finance I
- CFIN 401 Finance: Managerial Finance II
- CFIN 501 Finance: Investment Analysis I

Electives (select two)

Note: Students are allowed to choose only one of CECN 721 or CFIN 621 as their electives.

- CECN 301 Economics: Intermediate Macroeconomics I
- CECN 504 Economics: Intermediate Microeconomics I
- CECN 506 Economics: Money and Banking
- CECN 606 Economics: International Monetary Economics
- CECN 703 Economics: Public Finance I
- CECN 721 Economics: International Financial Markets
- CECN 803 Economics: Public Finance II
- CFIN 502 Finance: Personal Financial Planning
- CFIN 510 Finance: Entrepreneurial Finance
- CFIN 512 Finance: Risk Management and Insurance
- CFIN 601 Finance: Derivatives
- CFIN 612 Finance: Retirement and Estate Planning
- CFIN 621 Finance: International Finance

Distance Education

The following courses are available in a distance education format.

- CECN 104 Economics: Introductory Microeconomics
- CECN 204 Economics: Introductory Macroeconomics
- CFIN 300 Finance: Managerial Finance I
- CFIN 401 Finance: Managerial Finance II
- CECN 506 Economics: Money and Banking
- CECN 606 Economics: International Monetary Economics
- CFIN 502 Finance: Personal Financial Planning
- CFIN 512 Finance: Risk Management and Insurance
- CFIN 612 Finance: Retirement and Estate Planning

Energy Management and Innovation

This certificate program provides adult learners with an opportunity to acquire a level of knowledge and expertise that will permit them to contribute effectively to energy management, conservation, sustainability, and public policy governing this regulated sector; and to energy innovation, entrepreneurship, and the challenges and opportunities for developing new energy technologies and business enterprises. This program has been developed in cooperation with Ryerson's Centre for Urban Energy.

Admission Requirements

Mature student status and evidence of relevant college or university level coursework, or equivalent

OR

Mature student status together with relevant industrial or professional experience

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

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Recommended Sequence

Students are advised to take the courses in the following sequence:

CKEI 100
 CKPM 202
 CKES 190
 CKEI 110
 CKEI 120
 CKSS 100
 CKEI 130
 CECN 510
 CKEI 140

It is recommended that the five courses be taken before the capstone course (CKEI 140); however, CKEI 140 may be taken concurrently with the fifth course.

Required Courses

- CKEI 100 Energy Management: Energy Innovation and Entrepreneurship
- CKEI 140 Energy Management: Current Topics in Energy Management and Innovation
- CKES 190 Environmental Engineering Science: Renewable Energy and Green Technology
- CKPM 202 Project Management: Fundamentals of Project Management

Electives (select two)

- CECN 510 Economics: Environmental Economics
- CKEI 110 Energy Management: Energy Efficiency and Demand Response
- CKEI 120 Energy Management: Energy and the Public Policy Debate in Canada
- CKEI 130 Energy Management: An Introduction to Smart Grid
- CKSS 100 Sustainability: Fundamentals in Sustainability I

Distance Education

The following courses are available in a distance education format.

CKPM 202 Project Management: Fundamentals of Project Management
 CKSS 100 Sustainability: Fundamentals in Sustainability I

English as a Second/Additional Language

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

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

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 Open House

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

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
- 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 210 English as a Second/Additional Language: Reading/Listening Test Prep I

- COEN 220 English as a Second/Additional Language: Writing/Speaking Test Prep I
- 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

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 111 English as a Second/Additional Language: Language and Identity
- CLNG 112 English as a Second/Additional Language: Spoken and Written
- CLNG 113 English as a Second/Additional Language: Language and Public Life
- COEN 296 English as a Second/Additional Language: 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 410 English as a Second/Additional Language: Reading/Listening Test Prep II
- COEN 420 English as a Second/Additional Language: Writing/Speaking Test Prep II

Note to registered certificate program students First Level

COEN 210 and COEN 220 added.
COEN 311 and COEN 460 deleted.

Second Level

CLNG 111 replaces CLNG 100.
CNLG 112 replaces CLNG 300.
CLNG 113 replaces CLNG 200.
COEN 298, COEN 311, COEN 312, COEN 410,
COEN 420, and CLNG 300 added.
COEN 461 deleted.

Distance Education

The following courses are available in a distance education format.

- CLNG 111 English as a Second/Additional Language: Language and Identity
 CLNG 112 English as a Second/Additional Language: Language: Spoken and Written
 CLNG 113 English as a Second/Additional Language: Language and Public Life

English Literature and Popular Culture

This certificate is 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.

Academic Coordinator: Bill Emery,
 bemery@ryerson.ca

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 Open House

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

Certificate Requirements

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

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the

certificate at the beginning of their first course (see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

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

Required Courses

- CENG 108 English Literature: The Nature of Narrative I
- CENG 208 English Literature: The Nature of Narrative II

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 505 English Writing Development: Creative Writing
- 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 720 English Literature: The History of Rhetoric
- CENG 921 English Literature: Narrative in a Digital Age

Note to registered certificate program students

Required Courses

CENG 208 replaces CSSH 205.

Reading/Writing Culture Stream

CENG 720 added.

Distance Education

The following courses are available in a distance education format.

CENG 108 English Literature: The Nature of Narrative I

CENG 112 English Literature: Zap, Pow, Bang Pop Lit

Enterprise Architecture and Infrastructure Management

Formerly: Telecommunications Management

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

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

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

Admission Requirements

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

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

Program Open House

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

Certificate Requirements

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

Credit Policies

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

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

Certificate Registration

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

Requirements for Graduation

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

Required Courses

- CITM 207 Health Informatics: Computer-Enabled Problem Solving
- CITM 301 Information Technology Management: Introduction to IT Infrastructure
- CITM 305 Information Technology Management: Systems Analysis and Design
- CITM 600 Information Technology Management: Data Communications Network Design

Electives (select two)

- CITM 315 Information Technology Management: Network Administration
- CITM 513 Information Technology Management: Adv Infrastructure Deployment and Management
- CITM 704 Information Technology Management: Wireless and Mobile Communications
- CITM 732 Information Technology Management: Switching and Routing Laboratory
- CITM 750 Information Technology Management: IT Project Management
- CITM 820 Information Technology Management: Information Systems Security and Privacy

Note to registered certificate program students

Effective Fall 2012, the Certificate in Telecommunications Management has been revised to Enterprise Architecture and Infrastructure Management. After this time, students will receive the new certificate name.

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.

The addition of CITM 207 increases the number of required courses for certificate completion from three to four. The number of elective courses has been reduced from three to two.

Required Courses

CITM 505 deleted.
CITM 207 added.

Electives

CITM 820 replaces CITM 420.
CITM 350, CITM 515, CITM 520, CITM 705, CITM 710, and CITM 715 deleted.

Distance Education

The following courses are available in a distance education format.

- CITM 305 Information Technology Management: Systems Analysis and Design
- CITM 750 Information Technology Management: IT Project Management

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 Open House, or you may contact the Academic Coordinator, Dr. Vadim Bostan. The applications should be sent to The G. Raymond Chang School of Continuing Education, 297 Victoria Street.

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Required Courses

- CKES 102 Environmental Engineering Science: Hydrogeology Soil and Ground Water Science
- CKES 120 Environmental Engineering Science: Environmental and Atmospheric Processes
- CKES 210 Environmental Engineering Science: Applied Environmental Analysis
- CKES 220 Environmental Engineering Science: Environmental Law and Practice

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 Courses

CKES 210 added.

CKES 120 replaces CKES 100 and 101.

CKES 220 replaces CKES 104.

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.

Distance Education

The following courses are available in a distance education format.

- CKES 180 Environmental Engineering Science: Site Assessment

Environmental Public Health Leadership

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

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/eph1.

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

Ethics

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

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.

Academic Coordinator: Paul Bali, pbali@ryerson.ca

Admission Requirements

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

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

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

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 CPH 200.

Required Courses

- CPH 200 Humanities: 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
- CPHL 525 Philosophy: Environmental Ethics

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
- CPHL 614 Philosophy: Philosophy of Human Rights

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

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
- CPHL 525 Philosophy: Environmental Ethics
- 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: Personal Growth and Positive Psychology

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
- CPHL 507 Philosophy: Ethics and Disability
- CPHL 614 Philosophy: Philosophy of Human Rights
- CPOG 424 Politics and Public Administration: Human Rights and Global Politics
- CPPA 125 Politics and Public Administration: Rights, Equity, and the State

- CPPA 301 Politics and 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
- CPHL 507 Philosophy: Ethics and Disability
- CPHL 612 Philosophy: Philosophy of Law
- CPHL 921 Philosophy: Intellectual Property and Technology
- CPPA 301 Politics and 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: Women's Texts, Global Contexts
- CENG 720 English Literature: The History of Rhetoric
- 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
- CPHL 612 Philosophy: Philosophy of Law

- CPPA 125 Politics and Public Administration: Rights, Equity, and the State
- CSOC 705 Sociology: Law and Justice

Note to registered certificate program students

Electives – Group A (Environment Stream)

CPHL 525 added.

Electives – Group A (Human Rights and Administrative Justice Stream)

CPPA 125 replaces CPOG 315.

CPPA 301 replaces CPPA 629.

CPHL 614 added.

Electives – Group B (Environment Stream)

CPHL 525 added.

Electives – Group B (Human Rights and Administrative Justice Stream)

CPHL 507 and CPHL 614 added.

Electives – Group B (Law Stream)

CPPA 301 replaces CPPA 629.

CPHL 507 and CPHL 612 added.

Electives – Group B (Media and Culture Stream)

CENG 720 added.

Electives – Group B (Organizations and Professions Stream)

CPPA 125 replaces CPOG 315.

CPHL 612 and CSOC 705 added.

Distance Education

The following courses are available in a distance education format.

CINT 905 Interdisciplinary Studies:

Conflict Resolution in Community Services

CPHL 302 Philosophy: Ethics and Health Care

CPHL 307 Philosophy: Business Ethics

CPHL 509 Philosophy: Bioethics

CPHL 612 Philosophy: Philosophy of Law

CPPA 125 Politics and Public Administration: Rights, Equity, and the State

CPPA 301 Politics and Public Administration: Administrative Law

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 Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Required Courses

- 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 Courses

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.

CACC 100 Accounting:
Introductory Financial Accounting
CCMN 114 Communication:
Short Management Reports
CGMS 200 Global Management:
Introduction to Global Management
CGMS 401 Global Management: Operations
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

Family Supports

Note: All 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 Open House. For further information, contact The G. Raymond Chang School of Continuing Education office by email or 416.979.5035.

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

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

- CINT 900 Interdisciplinary Studies: Program Planning and Evaluation Strategies
- CVFS 401 Family Supports: Contemporary Family Issues
- CVFS 403 Family Supports: Family Supports Theory and Practice

Electives – Group A (select two)

- CINT 917 Interdisciplinary Studies: Urban Community Development
- 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 408 Family Supports: Practicum/Project

Electives – Group B (select one)

Students will choose one course from the following:

1. An additional course from Elective Group A above, excluding the two courses already completed.
2. One Interdisciplinary Studies (CINT) course.
3. One Nonprofit and Voluntary Sector Management (CINP) course.
4. With the submission of an approved Course Substitution/Directive Form signed by the academic coordinator, one course from Psychology, Sociology, Philosophy, or Politics and Public Administration courses, or equivalent.
5. 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.

Required Courses

CINT 900 replaces CVFS 404.

Electives – Group A

CINT 917 replaces CVFS 407.

CVFS 406 replaces CCLD 103.

CINT 920 added.

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.

- CINT 900 Interdisciplinary Studies: Program Planning and Evaluation Strategies
- CINT 920 Interdisciplinary Studies: Community Collaborations
- CVFS 401 Family Supports: Contemporary Family Issues
- CVFS 402 Family Supports: Families Power and Social Change
- CVFS 403 Family Supports: Family Supports Theory and Practice
- 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 Open House

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

Certificate Requirements

The successful completion of eight courses (four required courses and four electives), with a 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

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 Open House

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

Certificate Requirements

The successful completion of eight courses (five required courses and three electives (or 117 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

Electives (select three courses or 117 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 210 Business of Film:
Movie Marketing and Distribution
- CDMP 231 Film Studies:
Short Filmmaking: On Location
- CDMP 232 Film Studies:
Documentary Filmmaking in Cuba
- CDMP 700 Film Studies: Advanced
Screenwriting
- CFPN 502 Film Studies: Directing Screen
Performance - Basic Principles
- CFPN 531 Film Studies:
Cinematography and Lighting Design I
- CFPN 631 Film Studies: Cinematography and
Lighting Design II
- CMPC 101 New Media: Visual Studies 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 for certificate requirement from ten to eight.

Required Courses

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

Electives

CMPC 101 replaces CDNMM 113.

CDMP 240, CDMP 309, CDMP 409, CFPN 32A/B, and CFPN 33A/B deleted.

CDMP 210, CDMP 700, CFPN 502, and CFPN 631 added.

Elective group has been reduced to three courses (or 117 hours).

See page 241 for information about Summer Film School (CDMP 999), an intensive 12-week Film Studies program.

Financial Management in Canada

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

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 Open House

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

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

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
- CACC 742 Accounting: Canadian Business Taxation I
- CACC 842 Accounting: Canadian Business Taxation II
- 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
- CFIN 502 Finance: Personal Financial Planning
- CFIN 512 Finance: Risk Management and Insurance
- CFIN 601 Finance: Derivatives
- CFIN 612 Finance: Retirement and Estate Planning
- CFIN 812 Finance: Advanced Personal Financial Planning
- CGMS 200 Global Management: Introduction to Global Management
- CITM 102 Information Technology Management: Business Information Systems I
- CITM 595 Information Technology Management: Auditing of Information Systems
- CITM 696 Information 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 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 Professional Communication
- 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.

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
- CCMN 114 Communication: Short Management Reports
- CCMN 279 Communication: Introduction to Professional Communication
- 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 502 Finance: Personal Financial Planning
- CFIN 512 Finance: Risk Management and Insurance
- CFIN 612 Finance: Retirement and Estate Planning
- CGMS 200 Global Management: Introduction to Global Management
- CITM 102 Information Technology Management: Business Information Systems I
- CLAW 122 Law: 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

Financial Mathematics Modeling

This certificate program is intended to provide technically trained professionals with an understanding of how to determine the value of financial derivatives and complex investments, and how to assess and analyze, through modeling frameworks, the associated benefits and risks of these instruments. Participants will attain a mastery of financial mathematics, especially in the areas of stochastic processes and probability, in statistics, and in computation, together with an understanding of the highly complex operations of financial markets.

Admission Requirements

Mature student status and evidence of university level coursework in mathematics, economics, and/or finance, or equivalent (to be determined by the Academic Coordinator)

OR

Mature student status and other relevant qualifications or relevant industry experience (to be determined by 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/Placement Assessment

An interview/placement assessment is required for this program. Contact Anne-Marie Brinsmead (Program Director, Engineering, Architecture, and Science) at a2brinsm@ryerson.ca.

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Recommended Sequence

Students are advised to take the courses in the following sequence:

CKMT 800
 CMTH 304
 CMTH 500
 CKMT 801
 CKMT 802
 CKCS 120
 CFIN 300
 CFIN 501

Required Courses

- CKMT 800 Mathematics: Computational Methods in Mathematics and Statistics
- CKMT 801 Mathematics: Financial Mathematics I
- CKMT 802 Mathematics: Financial Mathematics II

Electives (select three)

- CFIN 300 Finance: Managerial Finance I
- CFIN 501 Finance: Investment Analysis
- CKCS 120 Computer Science: Structured Programming Using C
- CMTH 304 Mathematics: Probability and Statistics I
- CMTH 500 Mathematics: Introduction to Stochastic Processes

Distance Education

The following courses are available in a distance education format.

CFIN 300 Finance: Managerial Finance I

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 Planning Standards Council. For details check their website at www.fpsc.ca.

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 during the Open House, or mailed to the address on the form.

Program Open House

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

Certificate Requirements

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

Certificate Registration

Students may be registered in only one certificate program at any one time. To allow maximum flexibility in crediting external courses and/or courses previously taken at Ryerson, students should register in the certificate at the beginning of their first course

(see also Courses and Programs FAQ). For complete details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

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

Required Courses

- 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.

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

CFIN 502 Finance: Personal Financial Planning
 CFIN 512 Finance:
 Risk Management and Insurance
 CFIN 612 Finance:
 Retirement and Estate Planning
 CLAW 122 Law: Business Law
 CQMS 102 Quantitative Methods: Business
 Statistics I

Food Security

Note: All 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 Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Required Courses

- 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
- 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 and CFNN 404 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.

- CFNN 111 Nutrition: Nutrition for Nursing Practice
- 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
- CFNY 407 Food Security: Community Development and Food Security
- CFNY 408 Food Security: Urban Food Security
- CFNY 409 Food Security: Gender and Food Security
- CVFN 410 Food Security: Understanding Urban Agriculture

- CVFN 411 Food Security: Dimensions of Urban Agriculture
- CVFN 412 Food Security: Urban Agriculture Types
- CVFN 413 Food Security: Urban Agriculture Policy-Making

Course Delivery Schedule

	Fall 2012	Winter 2013	Spring/ Summer 2013
Required			
CFNY 403	I	I	I
CFNY 404	I		I
CFNY 405	I	I	
Electives			
CFND 401			
CFNN 111			I
CFNP 400			
CFNR 400			
CFNY 400			CI
CFNY 406		I	
CFNY 407			I
CFNY 408			I
CFNY 409	I		
CINT 912			
CSOC 808			
CVFN 233			
CVFN 410		I	
CVFN 411			I
CVFN 412		I	
CVFN 413	I		

C = Classroom

CI = Classroom/Internet

F = Field Study, often international

I = Distance Education via Internet

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

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

Fundraising Management

Note: All 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 charitable sector fundraising management
- develop and implement a wide range of strategies and tactics for a successful and ethical operation of a fundraising program

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

Academic Coordinator: Cathy Mann

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

Admission Requirements

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

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

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Recommended Sequence

New students are encouraged to begin with CINT 916.

Required Courses

- C1NP 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.

- C1NP 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

Course Delivery Schedule

	Fall 2012	Winter 2013	Spring/ Summer 2013
Required			
CINP 912	C	I	
CINT 916	C, I	C, I	I
CVFM 201		C	
CVFM 202	I		
Electives			
CVFM 203	C		
CVFM 302			I
CVFM 303		C	

C = Classroom

I = Distance Education via Internet

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

Gerontology

Note: All 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 and Public Administration, Psychology, Urban and Regional Planning, Early Childhood Education, and Family Studies. Participation from professionals in business, community services, and government is also an integral part of the Certificate in Gerontology.

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

- to comprehend the social, psychological, and biological theories that are applied within the field of gerontology, examining both normal and abnormal age-related changes that occur throughout the lifespan and their impact on practice

- to examine normal and abnormal age-related changes in social, psychological, and biological functioning and evaluate the implications of these changes on the individual's ability to interact with their social and physical environments
- to identify key changes in social roles, social supports, and policies that occur with aging within the areas of work and retirement, social and familial relationships, housing and environmental design, transportation and healthcare, and the law
- to recognize the diversity in aging as it relates to ethnicity, culture, gender, and sexuality and its impact on Canadian demography
- to analyze the current spectrum of cognitive variations associated with aging within the areas of intelligence, problem solving, learning and memory, personality, and mental health
- to identify and define both the quantitative and qualitative research methods, subject sampling techniques, approaches to assessing the validity and reliability of measurement instruments, and the significance of research ethics applied within the field of gerontology
- to identify how each component of a scientific research investigation contributes to the content knowledge within the field of gerontology and apply the appropriate steps to enable data assembly and data analysis
- to systematically interpret and critique research findings within the field and determine their implications for the practice of gerontology, and to examine the future trends in gerontology research and education

Academic Coordinator: Pria Nippak

Admission Requirements

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

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

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Recommended Sequence

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

Required Courses

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

Electives (select two)

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

Note to registered certificate program students

Electives

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

Distance Education

The following courses are available in a distance education format.

- CGER 298 Gerontology: Ability, Disability and Aging
- CINT 901 Interdisciplinary Studies: Gerontology: Critical Issues and Future Trends
- CINT 904 Interdisciplinary Studies: Health Promotion and Community Development
- CVGE 140 Gerontology: Gerontology: Aging and the Individual
- CVGE 141 Gerontology: Aging and Society
- CVGE 205 Gerontology: Understanding Research
- CVLT 102 Long Term Care: Principles of Long Term Care Service Delivery

Global Diasporas, Transnationalism, and Migration Cities

This certificate takes a contemporary approach to the phenomena of diaspora by examining the migration of peoples linked to the initial stages of a global economy in the twentieth and twenty-first centuries. The principal focus of the program will be on contemporary diasporas in the context of ever-accelerating globalization. Students will be introduced to the phenomenon of transnationalism—the multiple ties and interactions linking peoples and institutions across the borders of nation states.

Admission Requirements

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

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

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Required Sequence

Students are required to take the courses in the following sequence:

- CODS 101
- CGEO 691
- Electives (three selections)
- CODS 200

Required Courses

- CODS 101 Geography: Disaporas and Nationalism
- CGEO 691 Geography: Canadian Immigration: Patterns and Place
- CODS 200 Geography: Research in Diaspora and Globalized Cities

Electives (select a total of three courses)

Electives – Group A (select one or two)

- CGEO 108 Geography: Geography of the Global Village
- CGEO 206 Geography: Regions, Nations and the Global Community
- CODA 100 Demographic Analysis: Principles of Demographic Analysis

Electives – Group B (select one or two)

- CGEO 720 Geography: The Inner Landscape of Culture
- CGEO 820 Geography: The Outer Landscape of Culture
- CODA 110 Demographic Analysis: 3GIS Applications in Demography

Distance Education

The following courses are available in a distance education format.

- CODA 100 Demographic Analysis: Principles of Demographic Analysis
- CODA 110 Demographic Analysis: GIS Applications in Demography

Global Management Studies

Formerly: International Business

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

Academic Coordinator: Carlyle Farrell

Admission Requirements

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

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

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Required Courses

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

Electives (select two)

- CFIN 621 Finance: International Finance
- CGMS 450 Global Management: Project Management
- CGMS 601 Global Management: International Economics
- CGMS 690 Global Management: The North American Business Environment
- CGMS 691 Global Management: The Asian Business Environment
- CGMS 692 Global Management: The European Business Environment
- CGMS 695 Global Management: The Middle Eastern Business Environment

- CGMS 802 Global Management: Ethics and Regulation of Intn'l Bus
- CGMS 805 Global Management: Manufacturing Management
- CLAW 724 International Business Law: Legal Aspects of International Business

Professional Development

You can receive an acknowledgement of professional achievement once you have successfully completed three courses as follows:

Professional Development Award: Entering Foreign Markets requires completion of CGMS 522, CGMS 723, and CGMS 724.

The three courses must be completed with a GPA of 2.00 or higher within three years of your registration in the first course. The courses may be applied to the Global Management Studies certificate (students intending to complete the certificate must register before completion of the professional designation). See page 148 for more information about the Course Series in Entering Foreign Markets.

Note to registered certificate program students

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

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

Required Courses

CLAW 724 is now an Elective.
CCMN 443, CLAW 724, and CMHR 700 deleted.
CGMS 724 added.

Electives

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

Distance Education

The following courses are available in a distance education format.

CGMS 200 Global Management: Introduction to Global Management
CGMS 401 Global Management: Operations Management
CGMS 691 Global Management: The Asian Business Environment
CMKT 100 Marketing: Principles of Marketing

Graphic Communications

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

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

Admission Requirements

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

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

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a Program Open House. Please see Open House 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).

Required Courses

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

Electives (select three)

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

Note to registered certificate program students

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

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

Required

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

CMKT 100 deleted.

Electives

Elective group added; students select three courses.

CGRA 320 added.

Advanced Standing

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

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

Distance Education

The following courses are available in a distance education format.

CGRA 116 Graphic Communications:
Estimating in the Graphic Arts

Health Informatics

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

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

Admission Requirements

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

Admission Application

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

Open House, or mailed to the address on the form.

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

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Required Courses

- CHIT 100 Health Informatics:
Introduction to Health Informatics
- CHIT 201 Health Informatics:
Healthcare Interoperability
- CHIT 300 Health Informatics: Introduction to
Healthcare: Human Computer Interface
- CHSM 301 Health Services Management:
The Healthcare Systems

Electives (select four)

Students should select either CHIM 300 or CHSM 305, but not both, as they contain similar content.

Students should select CHSM 405 if they wish to pursue CMHR 650, as CHSM 437 does not provide a prerequisite for CMHR 650.

- CHIM 300 Health Information Management: Managing Health Information Services
- CHIM 301 Health Information Management: Healthcare Information Analysis
- CHIM 404 Health Information Management: Health Economics
- CHIM 405 Health Information Management: Issues in Health Information Management
- CHSM 305 Health Services Management: The Management Cycle
- CHSM 306 Health Service Management: Management Leadership and Decision-Making
- CHSM 437 Health Service Management: Human Resources Management
- CITM 207 Health Informatics: Computer-Enabled Problem Solving
- CITM 301 Information Technology Management: Introduction to IT Infrastructure

- CHSM 437 Health Service Management: Human Resources Management
- CITM 305 Information Technology Management: Systems Analysis and Design
- CITM 410 Information Technology Management: Business Process Design
- CITM 500 Information Technology Management: Logical Database Analysis and Design
- CITM 505 Information Technology Management: Managing Information Systems
- CITM 750 Information Technology Management: IT Project Management
- CMHR 405 Human Resources: Organizational Behaviour and Interpersonal Skills
- CMHR 650 Human Resources: Management of Change
- CZLW 100 Law: Information Access and Protection of Privacy
- CZLW 110 Law: Health Information Access and Privacy

Note to registered certificate program students
Electives

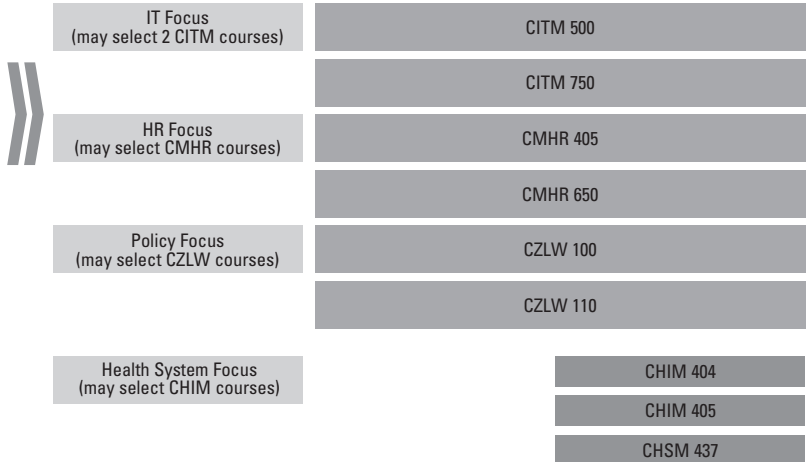
CHIM 301, CHSM 306, CHSM 437, CITM 207, and CITM 305 added.

PROGRAMS



Elective Streams
(4 Courses, depending on professional background)

Specialized content to supplement students' skills and knowledge, as well as support their individual professional goals



Distance Education

The following courses are available in a distance education format.

- CHIM 300 Health Information Management: Managing Health Information Services
- CHIM 301 Health Information Management: Healthcare Information Analysis
- CHIM 404 Health Information Management: Health Economics
- CHIM 405 Health Information Management: Issues in Health Information Management
- CHIT 100 Health Informatics: Introduction to Health Informatics
- CHSM 301 Health Services Management: The Healthcare Systems
- CHSM 305 Health Services Management: The Management Cycle
- CHSM 437 Health Service Management: Human Resources Management
- CITM 305 Information Technology Management: Systems Analysis and Design
- CITM 750 Information Technology Management: IT Project Management
- CMHR 405 Human Resources: Organizational Behaviour and Interpersonal Skills
- CMHR 650 Human Resources: Management of Change

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 Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Required Courses (select six)

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

- CCMN 279 Communication: Introduction to Professional Communication
- CHSM 301 Health Services Management: The Healthcare Systems
- CHSM 305 Health Services Management: The Management Cycle

- CHSM 326 Health Services Management: Law for Health Managers
- CHSM 407 Health Services Management: Financial Management
- CHSM 437 Health Services Management: Human Resources Management
- CVNU 321 Nursing: Financial Management

Electives (select three)

- CHSM 306 Health Services Management: Management Leadership and Decision-Making
- CHSM 307 Health Services Management: Principles of Long Term Care Service Delivery
- CHSM 308 Health Services Management: Project Management - Long Term Care
- CHSM 309 Health Services Management: Trends in Long Term Care Service Delivery
- CHSM 310 Health Services Management: Institutional Structure
- CHSM 417 Health Services Management: Research Methodology

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, CHSM 316, CVHS 450, CVLT 102, CVLT 401, and CVLT 502 deleted.

CHSM 301, CHSM 307, CHSM 308, CHSM 309, and CHSM 310 added.

Distance Education

The following courses are available in a distance education format.

- CCMN 279 Communication:
Introduction to Professional Communication
- CHSM 301 Health Services Management:
The Healthcare Systems
- CHSM 305 Health Services Management:
The Management Cycle
- CHSM 307 Health Services Management:
Principles of Long Term Care Service Delivery
- CHSM 309 Health Services Management:
Trends in Long Term Care Service Delivery
- CHSM 326 Health Services Management:
Law for Health Managers
- CHSM 417 Health Services Management:
Research Methodology
- CHSM 437 Health Services Management: Human
Resources Management

Health Studies

This certificate program will provide internationally trained professionals with career advancement opportunities, with a focus on Canadian health studies. Once participants have completed the five-course Professional Development Award, including courses focusing on language acquisition and workplace culture, they may complete an additional three courses to complete the Certificate in Health Studies, or transfer those courses to other health certificates focused in a specific area such as Health Informatics or Health Services Management.

Admission Requirements

OSSD with six OAC credits or Grade 12 U or M credits, or equivalent, or mature student status. Completion of the Professional Development Award will qualify students for entry into 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 Assessment

A language assessment is required for this program. Students may be required to take an English as a Second/Additional Language course in order to complete the Professional Development Award or certificate requirements. For more information, contact The Chang School at 416.979.5035.

Program Open House

Students who have questions about the admission requirements and/or would like to know more about this certificate are invited to attend a Program Open House. Please see Open House 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 Professional Development Award. The courses must be completed within three years of registration in the first course, and may be applied to the certificate (students intending to complete the certificate must register for the certificate before completion of the Professional Development Award).

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

For the five-course Professional Development Award, students are advised to take the courses in the following sequence:

CHSM 301

CDCE 400

CHIT 100 or CHSM 305

CHIT 201 or CHSM 306

CHIT 300 or CHSM 437

Students choosing CHIT 100, CHIT 201, and CHIT 300 should then complete CHSM 305, CHSM 306, and CHSM 437 in order to achieve the Certificate in Health Studies. Alternatively, they may apply CHIT 100, CHIT 201, and CHIT 300 towards completion of the Certificate in Health Informatics (see page 85).

Students choosing CHSM 305, CHSM 306, and CHSM 437 should then complete CHIT 100, CHIT 201, and CHIT 300 in order to achieve the Certificate in Health Studies. Alternatively, they may apply CHSM 305, CHSM 306, and CHSM 437 towards completion of the Certificate in Health Services Management (see page 87).

Required Courses

- CHSM 301 Health Services Management: The Healthcare Systems
- CDCE 400 Workplace Communication in Canada (WCC): Exploring Leadership Skills

Electives (select three for Professional Development Award or six for certificate)

- CHIT 100 Health Informatics: Introduction to Health Informatics
- CHIT 201 Health Informatics: Healthcare Interoperability
- CHIT 300 Health Informatics: Introduction to Healthcare: Human Computer Interface
- CHSM 305 Health Services Management: The Management Cycle
- CHSM 306 Health Services Management: Management Leadership and Decision-Making
- CHSM 437 Health Services Management: Human Resources Management

Distance Education

The following courses are available in a distance education format.

CHIT 100 Health Informatics:

Intro to Health Informatics

CHSM 301 Health Services Management: The Healthcare Systems

CHSM 305 Health Services Management: The Management Cycle

CHSM 437 Health Services Management: Human Resources Management

Human Resources Management

Note: All 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 Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Required Courses

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

Electives (select four)

- CLAW 529 Law: Employment and Labour Law
- CMHR 505 Human Resources: Organizational Behaviour II
- CMHR 522 Human Resources: Industrial Relations

- CMHR 600 Human Resources: Diversity and Equity in the Workplace
- CMHR 623 Human Resources: Recruitment and Selection (Staffing)
- CMHR 670 Human Resources: Special Topics in Org Behav and HR Mgmt
- CMHR 671 Human Resources: Human Resources Information Systems
- CMHR 711 Human Resources: Occupational Health and Safety
- CMHR 733 Human Resources: Training and Development
- CMHR 749 Human Resources: Compensation Management
- CMHR 849 Human Resources: Human Resources Planning

Note to registered certificate program students

This certificate has been revised effective July 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 Chang School at 416.979.5035.

Required Courses

CMHR 505 and CMHR 522 deleted.

Electives

CACC 100, CCMN 279, CECN 104, CFIN 300, COHS 208, COHS 718, and CQMS 102 deleted. CMHR 505, CMHR 522, CMHR 670, CMHR 671, CMHR 711, CMHR 749, and CMHR 849 added.

Distance Education

The following courses are available in a distance education format.

- CMHR 405 Human Resources: Organizational Behaviour and Interpersonal Skills
- CMHR 505 Human Resources: Organizational Behaviour II
- CMHR 523 Human Resources: Human Resources Management
- CMHR 600 Human Resources: Diversity and Equity in the Workplace
- CMHR 733 Human Resources: Training and Development
- CMHR 749 Human Resources: Compensation Management

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 managing large databases including census statistics and financial data. Mainframe computers, a significant segment of the IBM product line, are used for large scale simultaneous processing of very large information databases. Security of data warehousing and accuracy of processing are of paramount importance. Mainframes require sophisticated and specialized computer programming management and maintenance.

This certificate, developed in partnership with IBM Canada, provides students with a thorough overview of the Mainframe environment, including hardware systems, workflows, end-user interfaces, programming, and data management. The curriculum has been designed to provide graduates with comprehensive theoretical and practical knowledge in basic and advanced Mainframe computing, focusing 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 Science or a related field, 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 and submit an application for pre-approval and be approved before registering for the first course. In addition, applicants wishing to enroll in the first course must provide a resume listing employment experience, copies of credentials or academic standing, and certification documents. For further information on the program requirements, please contact the Program Manager, Janet Shusterman, at 416.979.5000, ext. 7907.

Program Open House

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

Certificate Requirements

The successful completion of six courses (one required course 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).

Required Courses

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

Electives (select five)

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

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

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

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

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

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

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

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

Admission Requirements

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

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

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Equipment/Facilities Use

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

Required Courses

- CMPC 101 New Media: Visual Studies I
- CMPC 103 New Media:
Art and the Classical Tradition
- CMPC 201 New Media: Concepts and Theories
- CMPC 203 New Media:
Art in the Modern World

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

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

Specialization in Photography

- CDFP 328 Photography: Photography Production I
- CDFP 329 Photography: Photography Production II
- CDFP 333 Photography: Photography and Digital Imaging
- CDFP 358 Photography: Photography and the Web

Note to registered certificate program students**Required Courses**

- CMPC 101 replaces CDN 113.
 CMPC 103 replaces CDN 110.
 CMPC 201 replaces CDN 210.
 CMPC 203 replaces CDN 111.
 CDN 211 and CDN 213 deleted.

Elective Sets

- CFSN 100 deleted (from Set A), therefore CDN 110 and CDN 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

- CDN 112, CDN 116, CDN 212, CDN 214, and CDN 322 deleted.
 CDN 109, CDN 209, CDN 121, and CDN 221 added.

Specialization in Photography

- CDFP 328 replaces CDFP 320.
 CDFP 329 replaces CDFP 321.
 CDFP 333 replaces CDFP 385.
 CDFP 358 replaces CDFP 386.

Industrial Organization and Policy

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

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

Academic Coordinator: Michael Jolly,
 mjolly@ryerson.ca

Admission Requirements

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

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

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

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

Required Courses

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

Electives (select three)

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

Note to registered certificate program students

Electives

CMTH 240 deleted.

Distance Education

The following courses are available in a distance education format.

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

Information Systems Development

The Certificate in Information Systems Development will not be accepting any new registrants. The certificate has been discontinued effective Fall 2011. Students formally registered in the certificate prior to June 30, 2011, must complete the program

requirements in effect at the time they registered. For further information, please contact the Business area at 416.979.5035.

Information Systems Management

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

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

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

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

Admission Requirements

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

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

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Required Courses

- CITM 100 Information Technology Management: Business and Information Systems
- CITM 207 Health Informatics: Computer-Enabled Problem Solving
- CITM 305 Information Technology Management: Systems Analysis and Design
- CITM 410 Information Technology Management: Business Process Design

Electives (select two)

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

The addition of CITM 207 increases the number of required courses for certificate completion from three to four. The number of elective courses has been reduced from three to two.

Required Courses

CITM 410 replaces CITM 505.
CITM 207 added.

Electives

CITM 350 replaces CITM 330.

Distance Education

The following courses are available in a distance education format.

- CITM 305 Information Technology Management: Systems Analysis and Design
- CITM 350 Information Technology Management: Concepts of e-Business
- CITM 750 Information Technology Management: IT Project Management

Infrastructure Asset Management and Renewal

This certificate program provides adult learners with the opportunity to acquire a comprehensive knowledge of and expertise in the fundamental processes and techniques required to establish and run an effective asset management program, including developing solutions associated with asset management, evaluation, preservation, and rehabilitation of existing infrastructure, repair materials and strategies, and risk, fiscal, and sustainability management best practices. When dealing with deteriorating buildings, tunnels, water towers, bridges, and public transit systems, together with naturally deteriorating and inadequate bridges and roads, participants will learn to apply holistic, systematic, and risk-based processes to decision making concerning the management and renewal of government, public, and private enterprise physical assets, including infrastructure, fixed plant, and mobile equipment.

Admission Requirements

Mature student status and evidence of relevant college or university level coursework, or equivalent

OR

Mature student status together with relevant industrial or professional experience

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

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Recommended Sequence

Students are advised to take the courses in the following sequence:

- CKAM 100
- CKAM 110
- CKAM 120
- CKAM 130

CKAM 140

CKAM 150

Required Courses

- CKAM 100 Infrastructure Asset Management: Infrastructure Asset Management
- CKAM 110 Infrastructure Asset Management: Infrastructure Asset Financial Management and Practices
- CKAM 120 Infrastructure Asset Management: Engineering Risk Management
- CKAM 130 Infrastructure Asset Management: Infrastructure Asset Maintenance, Planning, and Scheduling
- CKAM 140 Infrastructure Asset Management: Infrastructure Asset Evaluation and Rehabilitation
- CKAM 150 Infrastructure Asset Management: Infrastructure Project Evaluation

Interior Design, Fundamentals of

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

- those who are considering interior design as a possible career and are prepared to enter a full-time interior design program upon completion of the certificate
- those who have a general interest in interior design

Students should be aware that professional interior designers require membership in the Association of Registered Interior Designers of Ontario (www.arido.ca). Membership is extended only to graduates of degree and diploma programs in recognized schools of interior design who have several years' experience and who successfully complete the Association's qualifying examinations.

Admission Requirements

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

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

Program Open House

Students who have questions about the admission requirements and/or would like to know more about

this certificate are invited to attend a Program Open House. Please see Open House for dates, times, and location.

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Required Courses

- CDID 150 Interior Design: Design Theory
- CDID 151 Interior Design: Interior Design I: Drafting
- CDID 152 Interior Design: Interior Design I: Space Planning
- CIRC 112 Interior Design: Communications I

Electives (select three)

- CDID 153 Interior Design: Interior Materials and Finishes
- CDID 155 Interior Design: Design Dynamics I: Portfolio I
- CDID 157 Interior Design: Kitchen and Bathroom Design
- CIRC 113 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.

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

Required Courses

CDID 150 added.

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

CIRC 112 replaces CIRC 102.

Electives

CDID 156 deleted.

CDID 157 added.

CIRC 113 replaces CIRC 103.

Liberal Studies Elective deleted.

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.ryerson.ca/feas/programs/ieeqb.

Introductory International Economics

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

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

Academic Coordinator: Michael Jolly,
mjolly@ryerson.ca

Admission Requirements

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

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

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Required Courses

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

- CECN 301 Economics: Intermediate Macroeconomics I
- CECN 504 Economics: Intermediate Microeconomics I

Electives (select three)

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

Laboratory Practices Management

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

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

Admission Requirements

Applicants must meet one of the following criteria:
Undergraduate degree in a relevant field (e.g., Chemistry, Biology, Physics, or Environmental or Earth Science) with a GPA of 2.0, or equivalent
OR

A post-secondary diploma with a GPA of 2.00, or equivalent
OR

Three years of professional practice in a laboratory setting in a technical capacity

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

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Required Courses

- CKLP 100 Laboratory Practice: Professional Laboratory Practice
- CKLP 110 Laboratory Practice: Standards and Good Practices
- CKLP 120 Laboratory Practice: Intro to Lab Project Management
- CKLP 130 Laboratory Practice: Intro to Laboratory Regulations
- CKLP 140 Laboratory Practice: Laboratory and Research Ethics
- CKLP 150 Laboratory Practice: Sample Management
- CKLP 160 Laboratory Practice: Laboratory Info Management
- CKLP 170 Laboratory Practice: Data Handling

Electives (select four)

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

Distance Education

The following courses are available in a distance education format.

- CKLP 100 Laboratory Practice: Professional Laboratory Practice
- CKLP 110 Laboratory Practice: Standards and Good Practices
- CKLP 140 Laboratory Practice: Laboratory and Research Ethics
- CKLP 200 Laboratory Practice: Intro to Intellectual Property
- CKLP 240 Laboratory Practice: Fundamentals of Clinical Research

Landscape Design

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

Landscape Design combines the fields of art, science, and humanities. Landscape designers focus on designing and restoring sustainable public and private outdoor spaces. Their services are sought in the residential, commercial, and public sectors.

Whether you are just beginning or continuing your education in Landscape Design, this certificate offers an excellent education in the fundamental components that comprise the field of landscape design. Through course offerings, you will learn how to analyze, plan, design, manage, and sustain the built and natural environment.

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

Important note to students who formally registered in the certificate prior to July 1, 2009: If you registered in the Certificate in Landscape Design prior to July 1, 2009, you must complete the program requirements that were in effect at the time you registered.

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

Admission Requirements

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

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

Program Open House

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

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

Certificate Requirements

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

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

Note for Current Students:

As of Fall 2009, the Ryerson University Senate has approved revisions to this certificate that result in a change of the number of required courses from eight to six, 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 six-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 Anne Grady, Program Coordinator) 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.

Alternative Formats of Instruction

A number of courses in this program are available in a variety of alternative accelerated formats, beyond the typical 13-week, one evening per week class. Classes may be offered two evenings a week for six weeks; three evenings a week for four weeks; or every day for a full week. Please refer to specific course descriptions to see which formats the courses will be offered in during each term.

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

Leadership and Management for Nurses

The Certificate in Leadership and Management for Nurses will not be accepting any new registrants. The certificate has been discontinued effective Fall 2012. Students formally registered in the certificate prior to June 30, 2012, must complete the program requirements in effect at the time they registered. For further information, please contact Nursing at 416.979.5000, ext. 4775.

For information about the new Certificate in Advanced Nursing Leadership and Management, see page 113.

Lighting Design

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

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

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

Admission Requirements

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

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

Course Prerequisites

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

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you

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

Required Courses

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

Electives (select one)

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

Macroeconomic Theory and Policy

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

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

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

Academic Coordinator: Michael Jolly,
mjolly@ryerson.ca

Admission Requirements

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

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

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Required Courses

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

Electives (select three)

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

Distance Education

The following courses are available in a distance education format.

- CECN 104 Economics: Introductory Microeconomics
- CECN 204 Economics: Introductory Macroeconomics
- CECN 506 Economics: Money and Banking
- CECN 606 Economics: International Monetary Economics
- CECN 802 Economics: The Economies of East Asia

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 recognizes the high level of quality and professionalism that Ryerson brings to its Magazine and Web Publishing certificate program.

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

Admission Requirements

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

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

Program Open House

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

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Required Courses

Courses need not be taken in any particular order.

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

Electives (five 39-hour courses or equivalent combination of electives totalling 195 hours)

39-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

19.5-Hour Courses

Students may substitute two of the following 19.5-hour courses for any of the above 39-hour electives.

- CDJN 120 Magazine and Web Publishing: Magazine Fact-Checking and Research
- CDJN 121 Magazine and Web Publishing: Magazine Packaging
- CDJN 122 Magazine and Web Publishing: Advanced Magazine Editing
- CDJN 201 Magazine and Web Publishing: Magazine Advertising Sales and Marketing
- 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 207 Magazine and Web Publishing: The Online Publishing Toolkit
- 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 (19.5-Hour Courses)

CDJN 203 deleted.

CDJN 207 and CDJN 208 added.

Media Writing Fundamentals

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

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

Admission Requirements

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

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

Admission Application

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

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

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Required Courses

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

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

Electives (select five)

- CBDC 941 Broadcasting and Media Production: Dramatic Writing
- CBDC 942 Broadcasting and Media Production: Commercial Writing
- CBDC 943 Broadcasting and Media Production: Comedic Writing
- CBDC 944 Broadcasting and Media Production: Writing for Animation
- CBDC 945 Broadcasting and Media Production: Writing for Factual and Reality Programs
- CBDC 946 Broadcasting and Media Production: Interactive Writing
- CDMP 125 Film Studies: Fiction Screenwriting
- CDMP 126 Film Studies: Non-fiction Screenwriting
- CDMP 700 Film Studies: Advanced Screenwriting

Note to registered certificate program students

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

Required Courses

CBDC 940 deleted.

Electives

CDRT 204 deleted.

CDMP 125, CDMP 126, and CDMP 700 added.

Mental Health and Addictions

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

Admission Requirements

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

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

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

details on the advantages of early registration, registration deadlines, and transfer credit restrictions, all students should read Registration in a Certificate Program.

Requirements for Graduation

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

Required Courses

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

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

Electives – Group A (select at least two)

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

Electives – Group B (select two to four)

- COPS 250 Psychology: Independent Study
- CPSY 300 Psychology: Psychology and Law
- CPSY 302 Psychology: Child Development
- CPSY 412 Psychology: Human Brain Circuitry
- CPSY 602 Psychology: Developmental Psychopathology
- CPSY 605 Psychology: Psychology of Health and Health Care
- CPSY 620 Psychology: Psychology of Immigration
- 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 has been revised effective July 1, 2012. Students who formally registered in the certificate prior to July 1, 2012, 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.

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.

Electives – Group B

CPSY 300, CPSY 412, and CPSY 620 added.

Distance Education

The following course is available in a distance education format.

CPSY 300 Psychology: Psychology and Law

CPSY 607 Psychology: Drugs and Human Behaviour

Microeconomic Theory and Policy

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

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

Academic Coordinator: Michael Jolly, mjolly@ryerson.ca

Admission Requirements

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

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

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Required Courses

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

Electives (select three)

- CECN 129 Economics: Statistics for Economics I
- CECN 321 Economics: Introduction to Law and Economics
- CECN 501 Economics: Industrial Organization
- CECN 502 Economics: Economics of Natural Resources
- CECN 510 Economics: Environmental Economics

- CECN 605 Economics: Labour Economics
- CECN 640 Economics: The Economics of Immigration
- CECN 700 Economics: Intermediate Microeconomics II
- CECN 703 Economics: Public Finance I
- CECN 707 Economics: Economics of International Trade
- CECN 710 Economics: Transportation Economics
- CECN 715 Economics: Advanced Microeconomics
- CECN 803 Economics: Public Finance II

Distance Education

The following courses are available in a distance education format.

- CECN 104 Economics: Introductory Microeconomics
- CECN 204 Economics: Introductory Macroeconomics
- CECN 707 Economics: Economics of International Trade

Mining Management

This certificate program will provide students with additional competencies in natural resource development, financing, and value creation in the mining industry. This 234-hour, post-baccalaureate certificate is designed to provide employable skills and act as a direct channel for students to access a large and growing sector of the Canadian economy. It addresses sustainability in the context of corporate social responsibility, exploration and development operations, risk factors, the reporting of these findings, and managerial strategies in the mining sector.

Admission Requirements

Applicants must complete an application for pre-approval form, be approved by the academic coordinator, and meet the following criteria:

An undergraduate degree with a GPA of 2.00

AND

Five years of professional experience 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.

Admission Application

Students seeking admission to this program are required to complete an application for pre-approval

and submit it to the academic coordinator. To obtain an application, visit Forms and Documents. The completed application, together with transcripts, may be presented to the academic coordinator during the Open House, or mailed to the address on the form.

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Recommended Sequence

Students are advised to take the courses in the following sequence:

- CZMM 403
- CZMM 420
- Electives (three selections)
- CZMM 500

Required Courses

- CZMM 403 Mining Management: CSR, Sustainability, and Mining

- CZMM 420 Mining Management: Resource Valuation, Financing, and Investor Relations
- CZMM 500 Mining Management: Corporate Strategy in the Mining Sector

Elective Courses (select three)

- CZMM 411 Mining Management: Exploration and Development Operations
- CZMM 421 Mining Management: Risk Management and the Mining Sector
- CZMM 422 Mining Management: Mining Management Accounting
- CZMM 430 Mining Management: Mining in the Global Environment

Music: Global and Cultural Contexts

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

Academic Coordinator: Paul

Swoger-Ruston, pruston@ryerson.ca (copying)
Associate Program Director, Anne-Marie
Brinsmead, at azbrinsm@ryerson.ca)

Admission Requirements

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

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

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Recommended Sequence

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

Required Courses

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

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

Electives – Group A (select one or two)

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

Electives – Group B (select three)

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

Note to registered certificate program students

Electives – Group B

CMUS 303 and CMUS 403 added.

Neuroscience – Stroke Care, Advanced

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

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

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

Program Manager: Paula Mastrilli,
ceneuroscience@ryerson.ca or 16.979.5000, ext. 2061

Admission Requirements

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

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

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

Students seeking admission to this program are required to complete an application for pre-approval.

Visit the online version of this certificate at www.ryerson.ca/ce to complete an application via the online eligibility form.

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

Admission Interview

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

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

News Studies

This certificate program is designed to provide students with a thorough understanding of how journalists gather, report, analyze, and explain what is considered “news.” It is of interest to those whose work intersects with journalists, media relations personnel, individuals interested in news and the media, and students interested in pursuing a career in communications.

Admission Requirements

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

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

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Required Sequence

Students are required to take the courses in the following sequence:

CNNS 101
Electives (five selections)

Required Course

- CNNS 101 Journalism: Introduction to News Studies

Electives (select five)

- CJRN 123 Journalism: Ethics and Law in the Practice of Journalism
- CJRN 401 Journalism: History of Journalism
- CJRN 404 Journalism: Journalism’s Best
- CJRN 412 Journalism: Documentary Survey
- CJRN 500 Journalism: Journalism and the Arts
- CJRN 502 Journalism: Journalism and the World of Business
- CJRN 505 Journalism: Health and Science Journalism
- CJRN 506 Journalism: International Journalism
- CJRN 512 Journalism: Reporting Sports
- CNNS 102 Journalism: Understanding Multimedia Journalism

Nonprofit and Voluntary Sector Management

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

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

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

- an interdisciplinary curriculum pooling knowledge from three academic disciplines: business management, politics and public administration, and social work
- a practical blend of theory and application taught by academics and practitioners

- a wide range of current and relevant courses covering key areas such as marketing, financial management, fundraising, advocacy, strategic planning, program evaluation, organizational management, and organizational change
- Courses are available in a variety of formats, including distance via the Internet.

Who Will Benefit

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

Centre for Voluntary Sector Studies: Gerda Kaegi, Academic Coordinator, gkaegi@ryerson.ca

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

Admission Requirements

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

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

Program Open House

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

Certificate Requirements

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

Course Delivery Schedule

	2012/2013			2013/2014			2014/2015			2015/2016			2016/2017		
	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	D	H		H	D		D	H		H	D		D	H	
CINP 920	H	D			D			H		H		D		H	
Electives															
CINP 910		D		H		D	H		D		H		D		
CINP 911	D			C		D		C	D	C				C	
CINP 912	C	D	D	D	C		C	D		D	C		C	D	
CINP 913	H		D		H/D		D	H		H	D			D	H
CINP 914	D	C		C	D		C	D		D	C		C		D
CINP 915		H		D	H		H		D		H	D	H	D	
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.

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.

Distance Education

All courses in this certificate are available in a distance education format. Distance education offerings are shown in the chart on page 112.

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

- C1NP 900 Nonprofit:
Intro to the Nonprofit / Voluntary Sector
- C1NP 901 Nonprofit:
Developing Effective Organizations
- C1NP 902 Nonprofit: Program Evaluation
- C1NP 920 Nonprofit: Critical Issues

Electives (select four)

- C1NP 910 Nonprofit: Strategic Planning
- C1NP 911 Nonprofit:
Advocacy and Governmental Relations
- C1NP 912 Nonprofit:
Marketing for NonProfit Organizations
- C1NP 913 Nonprofit: Leading Through Change
- C1NP 914 Nonprofit: Issues of Diversity
- C1NP 915 Nonprofit: Financial Management
- C1NP 916 Nonprofit:
NGOs and World Governance

Nursing Leadership and Management, Advanced

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

This certificate program is designed to meet the needs of nurses currently employed or aspiring to be employed in leadership and management roles within a health services setting. The program builds on the foundational leadership and management content encompassed by a baccalaureate degree; provides access to courses that will focus on students' main area of leadership and/or management interest; and provides students with the opportunity to apply newly acquired knowledge to a practical leadership and/or management issue.

Admission Requirements and Application

Students seeking admission to this certificate program must be Registered Nurses (RN) who are registered with the professional governance body of their jurisdiction. They must hold a Canadian undergraduate degree in Nursing (BScN) or equivalent degree. Applicants must also complete an application for pre-approval and be approved by the academic coordinator before registering in their first course.

Students seeking admission to this certificate program are required to complete an application for pre-approval. Visit the online version of this certificate at www.ryerson.ca/ce to complete an application via the online eligibility form.

Admission Interview/Placement Assessment

An individual consultation with a program advisor is required in order to assist students in selecting both a focus for the certificate and appropriate electives. Contact the Nursing program advisors at cenurse@ryerson.ca or 416.979.5000, ext. 4775.

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Recommended Sequence

Students are advised to take the courses in the following sequence:

CVNU 360

Electives – Group A (select one)

Electives – Group B (select one or two)

Electives – Group C (select one or two)

CVNU 370

It is highly recommended that students complete CVNU 360 as their first course. The capstone course, CVNU 370, may only be taken as the last course in the certificate. Students are encouraged to contact the Nursing program advisors in order to plan their capstone registration.

Required Courses

- CVNU 360 Nursing: Advanced Nursing Leadership and Management
- CVNU 370 Nursing: Change and Innovation

Electives (select a total of four courses)

Electives – Group A: Program Planning and Evaluation (select one)

- CHSM 408 Health Services Management: Program Planning and Evaluation
- CINP 902 Nonprofit and Voluntary Sector Management: Program Evaluation
- CINT 900 Interdisciplinary Studies: Program Planning and Evaluation Strategies
- CPPA 402 Politics and Public Administration: Program Planning and Evaluation

Electives – Group B: Leadership (select one or two)

- CINT 905 Interdisciplinary Studies: Conflict Resolution in Community Services
- CINT 907 Interdisciplinary Studies: Team Work for Community Services
- CINT 911 Interdisciplinary Studies: International Community Development
- CMHR 505 Human Resources: Organizational Behaviour II
- CMHR 638 Human Resources: Leaders as Managers and Coaches
- CMHR 741 Human Resources: Managing Interpersonal Dynamics

Electives – Group C: Management (select one or two)

- CHIM 300 Health Information Management: Managing Health Information Services
- 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
- CINP 915 Nonprofit: Financial Management
- CINT 920 Interdisciplinary Studies: Community Collaborations
- CKPM 202 Project Management: Fundamentals of Project Management
- CKPM 203 Project Management: Planning and Scheduling
- CKPM 209 Project Management: Project Risk and Quality Management
- CMHR 650 Human Resources: Management of Change
- CMHR 721 Human Resources: Negotiation and Conflict Resolution
- CMHR 841 Human Resources: Organization Theory and Design
- CVLT 102 Long Term Care: Principles of Long Term Care Service Delivery
- CVNU 321 Nursing: Financial Management
- CVSW 200 Social Work: Community Engagement Foundations
- CVSW 210 Social Work: Community Engagement Practices

Distance Education

The following courses are available in a distance education format.

- CINP 902 Nonprofit: Program Evaluation
- CINP 915 Nonprofit: Financial Management
- CINT 900 Interdisciplinary Studies: Program Planning and Evaluation Strategies

CINT 905 Interdisciplinary Studies:
Conflict Resolution in Community Services

CINT 907 Interdisciplinary Studies:
Team Work for Community Services

CINT 911 Interdisciplinary Studies:
International Community Development

CINT 920 Interdisciplinary Studies:
Community Collaborations

CHIM 300 Health Information Management:
Managing Health Information Services

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

CKPM 202 Project Management:
Fundamentals of Project Management

CKPM 203 Project Management:
Planning and Scheduling

CKPM 209 Project Management:
Project Risk and Quality Management

CMHR 505 Human Resources:
Organizational Behaviour II

CMHR 650 Human Resources:
Management of Change

CVLT 102 Long Term Care:
Principles of Long Term Care Service Delivery

CVSW 200 Social Work:
Community Engagement Foundations

CVSW 210 Social Work:
Community Engagement Practices

Occupational Health and Safety

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

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

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

Admission Requirements

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

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

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Required Courses

- CCMN 114 Communication:
Short Management Reports
- COHS 208 Occupational Health:
Occupational Health and Safety Law
- COHS 508 Occupational Health:
Occupational Health
- COHS 608 Occupational Health:
Hazard Recognition and Control

- COHS 718 Occupational Health: Systems Management I
- CVOH 217 Occupational Health: Measurement and Analysis
- CVOH 221 Occupational Health: Topics in Occupational Health and Safety

Electives (select one)

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

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

Note to registered certificate program students Electives

CPPA 101 replaces CPPA 322.

Distance Education

The following courses are available in a distance education format.

- CCMN 114 Communication: Short Management Reports
- CMHR 405 Human Resources: Organizational Behaviour and Interpersonal Skills
- COHS 208 Occupational Health: Occupational Health and Safety Law
- COHS 477 Occupational Health: Integrated Disability Management
- COHS 508 Occupational Health: Occupational Health
- COHS 608 Occupational Health: Hazard Recognition and Control
- COHS 718 Occupational Health: Systems Management I
- CPPA 101 Politics and Public Administration: Cdn Public Administration I: Institutions
- CVOH 217 Occupational Health: Measurement and Analysis
- CVOH 221 Occupational Health: Topics in Occupational Health and Safety

Organizational Leadership

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

Organizational leadership and management skills are critical to success in business, in the voluntary sector, community services, and any profession where you

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

Admission Requirements

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

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

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Required Courses

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

Electives (select four)

- CMHR 505 Human Resources: Organizational Behaviour II
- CMHR 638 Human Resources: Leaders as Managers and Coaches
- CMHR 650 Human Resources: Management of Change
- CMHR 700 Human Resources: Cross-Cultural Dimensions of Organizational Behaviour
- CMHR 721 Human Resources: Negotiation and Conflict Resolution
- CMHR 741 Human Resources: Managing Interpersonal Dynamics
- CMHR 841 Human Resources: Organization Theory and Design
- CMHR 850 Human Resources: Organization Development

Note to registered certificate program students

Electives

CMHR 638 added.

Distance Education

The following courses are available in a distance education format.

- CMHR 405 Human Resources: Organizational Behaviour and Interpersonal Skills
- CMHR 505 Human Resources: Organizational Behaviour II
- CMHR 640 Human Resources: Leadership
- CMHR 650 Human Resources: Management of Change

Photography Studies

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

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

Individual Courses

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

Admission Requirements

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

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

Advanced Standing

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

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Equipment/Facilities Use

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

Required Courses

- CDFP 328 Photography: Photography Production I
- CDFP 329 Photography: Photography Production II
- CDFP 391 Photography: History of Photography I

Electives (select five)

- CDFP 320 Photography: Analog Photography (formerly Techniques of Photography I)
- CDFP 322 Photography: Photography for Ad Agencies (formerly Art Direction/Design Techniques)
- CDFP 332 Photography: Digital Printing
- CDFP 333 Photography: Photography and Digital Imaging
- CDFP 358 Photography: Photography and the Web
- CDFP 367 Photography: Photoshop for Photographers
- CDFP 378 Photography: 20th Century Photography
- CDFP 381 Photography: Advanced Fashion Photography
- CDFP 382 Photography: Advanced Portrait Photography
- CDFP 389 Photography: Commercial Photography I (formerly Commercial Product Photography I)
- CDFP 390 Photography: Commercial Photography II (formerly Commercial Product Photography II)
- CDFP 392 Photography: Documentary Photography (formerly Approaches to Documentary Photography)
- CDFP 398 Photography: History of Photography II

- CDFP 403 Photography: Creative Wedding Photography
- CDFP 404 Photography: Magazine Photography (formerly Photography Assignments)
- CDFP 405 Photography: Architectural Photography
- CFPN 532 Photography: Advanced Studio Lighting
- CFPN 536 Photography: Media Business Studies
- CFPN 539 Photography: The Human Figure
- CFPN 543 Photography: Historical Processes Workshops

Note to registered certificate program students

This certificate has been revised effective July 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.

Required Courses

The Traditional Stream and Digital Stream have been merged.

CDFP 328 replaces CDFP 320 (Traditional Stream) and CDFP 383 (Digital Stream).

CDFP 329 replaces CDFP 321 (Traditional Stream) and CDFP 384 (Digital Stream).

Electives

CDFP 385, CDFP 386, CDFP 397, and CNPF 549 deleted.

CDFP 333, CDFP 358, CDFP 367, CDFP 368, CDFP 403, CDFP 404, CDFP 405, CFPN 539, and CFPN 543 added.

CDFP 320 moved from Required Courses to Electives.

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

Physical Activity: Assessment and Promotion

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

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

Admission Requirements

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

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

Please contact Diane Candioto, Academic Coordinator, by email at dcandiot@ryerson.ca prior to enrolling in a course.

Admission Application

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

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

To graduate, you must successfully complete the published certificate curricula from the year you

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

Required Courses

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

Note to registered certificate program students

This program has been revised effective July 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

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

Admission Requirements

Completion of Introductory French I (CFRE 101) with a minimum grade of C+, or admission by placement assessment and interview is required.

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

Program Open House

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

Certificate Requirements

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

Advanced Placement

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

Certificate Registration

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

Requirements for Graduation

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

Required Courses

(see Advanced Placement above)

- CFRE 201 French: Introductory French II

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

Advanced Level Electives (select one)

- CFRE 402 French: French Conversation and Pronunciation
- CFRE 502 French: Advanced Business French I
- CFRE 505 French: Language and Culture I
- CFRE 507 French: English-French Translation I
- CFRE 508 French: Intro to 20th C French Literature I
- CFRE 509 French: Franco-Canadian Literature I
- CFRE 510 French: Advanced Grammar and Writing I
- CFRE 515 French: Introduction to Business French
- CFRE 602 French: Advanced Business French II
- CFRE 605 French: Language and Culture II
- CFRE 607 French: English-French Translation II
- CFRE 608 French: Intro to 20th C French Literature II
- CFRE 609 French: Franco-Canadian Literature II
- CFRE 610 French: Advanced Grammar and Writing II
- CFRE 701 French: French for Today I
- CFRE 704 French: Intro to Franco-Canadian Culture I
- CFRE 707 French: Introduction to French-English Translation
- CFRE 801 French: French for Today II
- CFRE 803 French: French Theatre: 20th C and Contemporary
- CFRE 804 French: Intro to Franco-Canadian Culture II
- CFRE 903 French: The Francophone Short Story

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, CFRE 803, and CFRE 903 added.

Proficiency in Spanish

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

Admission Requirements

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

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

Program Open House

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

Certificate Requirements

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

Advanced Placement

If the student completes four courses at a level higher than CSPN 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.

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

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

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).

Applicants must complete an application for pre-approval form to be approved by the academic coordinator. To obtain an application, visit www.ryerson.ca/ce and click on Forms and Documents, or call 416.979.5035.

Note: Admission requirements may be waived if a prospective student has either exceptional work experience or educational qualifications. To see if you qualify, please contact Debbie Wilk, Manager, Program Support, at dwilk@ryerson.ca or attend a Program Open House.

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

Program Open House

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

Certificate Requirements

The successful completion of six credits (four required courses and six to eight electives (or 156 course hours)), with a cumulative grade point average of 2.00 or higher, is required for the certificate.

Certificate Registration

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

Requirements for Graduation

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

Required Courses

- CKPP 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 156 hours)

19.5-Hour Courses

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

39-Hour Courses

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

Note to registered certificate program students

Electives (19.5-Hour Courses)

CKPP 280 added.

Distance Education

The following courses are available in a distance education format.

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

Project Management

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

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

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

Certificate Specializations

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

Admission Requirements

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

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

Program Open House

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

Certificate Requirements

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

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

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

Certificate Registration

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

Requirements for Graduation

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

Recommended Sequence

Students are advised to take the courses in the following sequence: CKPM 202 or CITM 750, CKPM 203, CKPM 211, CKPM 212, CKPM 209. Students in the Business and Information Management stream are advised to take CITM 305 and CITM 410 first.

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 Information 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:

Option 1: Project Management General Stream, Required Courses

Note: Students may substitute one of the following courses with one course from 'Electives – All Streams'.

- 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

Note: Students in this stream should take CITM 305 and CITM 410 first, then take CITM 750 or CKPM 202, followed by the required courses in the core program.

- CITM 305 Information Technology Management: Systems Analysis and Design
- CITM 410 Information 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 39-hour course or two 19.5-hour courses)

19.5-Hour Courses

- CKPP 110 Program and Portfolio Management: Overview of Program Management
- CKPP 120 Program and Portfolio Management: Overview of Portfolio Management

39-Hour Courses

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

Note to registered certificate program students

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

Electives

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

Distance Education

The following courses are available in a distance education format.

- CCMN 114 Communication: Short Management Reports
- CHSM 301 Health Services Management: The Healthcare Systems
- CHSM 305 Health Services Management: The Management Cycle
- CINT 905 Interdisciplinary Studies: Conflict Resolution in Community Services
- CITM 305 Information Technology Management: Systems Analysis and Design
- CITM 750 Information Technology Management: IT Project Management

CKPM 202 Project Management: Fundamentals of Project Management
 CKPM 203 Project Management: Planning and Scheduling
 CKPM 207 Project Management: Project Management Systems
 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
 CKPP 110 Program and Portfolio Management: Overview of Program Management
 CKPP 120 Program and Portfolio Management: Overview of Portfolio Management
 CMHR 405 Human Resources: Organizational Behaviour and Interpersonal Skills
 CVLT 102 Long Term Care: Principles of Long Term Care Service Delivery

Project Management Bridging Certificate for Internationally Educated Professionals

This certificate program will prepare internationally educated professionals with technical backgrounds such as engineers, information technology professionals, scientists, environmentalists, and other technical professionals to become employed in middle-level management (MLM) positions in the field of project management. Participants will gain knowledge and skills in estimating, scheduling, risk analysis, quality assurance, leadership, problem-solving, and Canadian workplace culture and communication.

Certificate graduates will increase their employability by acquiring a level of knowledge and expertise that will permit them to move into project management roles. This certificate will help prepare students to write the Project Management Professional (PMP)® examination offered by the Project Management Institute (PMI). Certificate graduates will be eligible to continue on to the Certificate in Project Management and/or the Certificate in Program and Portfolio Management, both offered by The Chang School.

Admission Requirements

An admission application is required for this program. A pre-approval process will be conducted by the program manager, including an orientation/information session, a one-on-one interview, and a language assessment. For more information, contact mim@ryerson.ca or 416.979.5000, ext. 2705.

Eligible applicants must have completed an undergraduate degree, and have a minimum of two years of professional experience in a related field.

They must also:

Be an accepted and registered participant in the Gateway for International Professionals' Middle-level Managers (MLM) with Technical Background Bridging Program
 AND

Be a legal resident of Ontario at the time of application, and be eligible to work in Canada
 AND

Have resided in Canada for no more than 10 years
 AND

Be an internationally educated professional in a suitable technical discipline
 AND

Demonstrate English language proficiency through any of Ryerson University's approved English language proficiency test scores

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

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

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

Required Sequence

Students are required to take the courses in the following sequence:

- CKPM 202
- CKPM 211
- CKPM 212
- CCMN 432
- CKPM 216
- CDCE 400

Required Courses

- CCMN 432 Communication: Communication in the Engineering Professions
- CDCE 400 Workplace Communication in Canada (WCC): Exploring Leadership Skills
- CKPM 202 Project Management: Fundamentals of Project Management
- CKPM 211 Project Management: Leadership in Project Management
- CKPM 212 Project Management: Project Cost and Procurement Management
- CKPM 216 Project Management: Project Management Internship

Distance Education

The following courses are available in a distance education format.

- CKPM 202 Project Management: Fundamentals of Project Management
- CKPM 211 Project Management: Leadership in Project Management
- CKPM 212 Project Management: Project Cost and Procurement Management

Psychology

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

Students may choose electives from a variety of areas in psychology or they may choose to specialize.

Suggested specializations include the following:

- psychological principles of growth and development
- abnormal aspects of human behaviour
- explanations of personality and its development
- the study of social behaviour
- applications of psychology in organizations

Admission Requirements

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

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

Transfer Credits

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

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Required Courses

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

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

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

Electives (select five)

- CPSY 202 Psychology: Introduction to Psychology II
- CPSY 214 Psychology: Psychopharmacology
- CPSY 215 Psychology: Psychology of Addictions
- CPSY 300 Psychology: Psychology and Law
- CPSY 302 Psychology: Child Development
- CPSY 304 Psychology: Psychology of Gender
- CPSY 308 Psychology: Psychology of Thinking
- CPSY 324 Psychology: Biological Psychology
- CPSY 325 Psychology: Psychological Disorders
- CPSY 402 Psychology: Adult Development
- CPSY 412 Psychology: Human Brain Circuitry
- 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
- CPSY 941 Psychology: Cross Cultural 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:

- Abnormal Behaviour: CPSY 215, CPSY 325, CPSY 602, CPSY 606, CPSY 607, CPSY 805, CPSY 806
- Biology and Behaviour: CPSY 214, CPSY 215, CPSY 324, CPSY 412, CPSY 607, CPSY 621
- Growth and Development: CPSY 302, CPSY 402, CPSY 602, CPSY 802
- Personality: CPSY 505, CPSY 706, CPSY 805
- Social Behaviour: CPSY 304, CPSY 504, CPSY 518, CPSY 614, CPSY 807, CPSY 808
- Social Issues: CPSY 300, CPSY 518, CPSY 607, CPSY 620, CPSY 808, CPSY 941

Note to registered certificate program students

This certificate has been revised effective July 1, 2012. Students who formally registered in the certificate prior to July 1, 2012, 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.

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, CPSY 412, CPSY 518, and CPSY 941 added.

CPSY 813 deleted.

Specialization

Biology and Behaviour and Social Issues groups added.

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: All 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 Joe Zboralski, Department of Politics and Public Administration: jzboralski@politics.ryerson.ca.

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

These certificates will provide students with the following:

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

These certificates fulfil Levels 1 and 2 of the Public Administration and Governance degree program.

Program Information: Department of Politics and Public Administration, 416.979.5057.

Admission Requirements

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

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

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Required Courses

- CPPA 101 Politics and Public Administration: Cdn Public Administration I: Institutions

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

Required Group 1 (select two)

- CPPA 120 Politics and Public Administration: Canadian Politics and Government
- CPPA 121 Politics and Public Administration: Ontario Politics and Government
- CPPA 122 Politics and Public Administration: Local Politics and Government
- CPPA 124 Politics and Public Administration: Indigenous Politics and Governance

Liberal Studies Elective Group A

(one 1-term lower-level course required)

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

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

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

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

Note to registered certificate program students

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

Required

CPOL 332 moved to Required Group 1.

CPPA 101 replaces CPPA 322.

CPPA 102 replaces CPPA 422.

CPPA 125 replaces CPOG 315.

Required Group 1

CPPA 120 replaces CPOL 332.

CPPA 121 replaces CPOG 310.

CPPA 122 replaces CPOL 122.

CPPA 124 replaces CPOG 440.

Distance Education

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

CPPA 101 Politics and Public Administration: Cdn Public Administration I: Institutions

CPPA 102 Politics and Public Administration: Cdn Public Administration II: Processes

CPPA 120 Politics and Public Administration: Canadian Politics and Government

CPPA 122 Politics and Public Administration: Local Politics and Government

CPPA 125 Politics and Public Administration: Rights, Equity, and the State

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 Joe Zboralski, Department of Politics and Public Administration: jzboralski@politics.ryerson.ca.

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

These certificates will provide students with the following:

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

These certificates fulfil Levels 1 and 2 of the Public Administration and Governance degree program.

Program Information: Department of Politics and Public Administration, 416.979.5057.

Admission Requirements

Successful completion of the Certificate in Public Administration and Governance – Level 1.

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

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Required Courses

- CPPA 211 Politics and Public Administration: Public Policy

Required Group 1

(select three, not previously taken)

- CPPA 120 Politics and Public Administration: Canadian Politics and Government
- CPPA 121 Politics and Public Administration: Ontario Politics and Government
- CPPA 122 Politics and Public Administration: Local Politics and Government
- CPPA 235 Politics and Public Administration: Theories of the State
- CPPA 303 Politics and Public Administration: Financial Management
- CPPA 319 Politics and Public Administration: Politics of Work and Labour

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

(one course required)

- CECN 104 Economics: Introductory Microeconomics
- CECN 204 Economics: Introductory Macroeconomics
- CECN 210 Economics: Inflation and Unemployment in Canada
- CECN 220 Economics: Evolution of the Global Economy
- CECN 320 Economics: Introduction to Financial Economics

Professionally Related Elective Group C

(two 1-term courses required)

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

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

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

Students who have successfully completed the requirements for the Certificate and Advanced

Certificate are eligible to continue to the degree level. For more information, contact the Department of Politics and Public Administration, 416.979.5057.

Note to registered certificate program students

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

Required

CPPA 211 replaces CPPA 623. CPPA 525 and CPOG 319 moved to Required Group 1. CPOG 230 deleted.

Required Group 1

Required Group 1 added; students select three courses not previously taken.

CPPA 120, CPPA 121, CPPA 122, and CPPA 303 added.

CPPA 235 replaces CPPA 525. CPPA 319 replaces CPOG 319.

Professionally Related Elective Group B

CECN 210, CECN 220, and CECN 320 added.

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

CPPA 120 Politics and Public Administration: Canadian Politics and Government

CPPA 122 Politics and Public Administration: Local Politics and Government

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.

Academic Coordinator: Patrice Dutil,
pdutil@politics.ryerson.ca

Admission Requirements

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

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

Admission Application

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

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

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

Required Courses

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

Electives (select three)

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

Note to registered certificate program students

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

Required

- CPPA 211 replaces CPPA 623.
- CPPA 404 replaces CPPA 604.
- CPPA 501 replaces COPA 501.

Electives

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

Distance Education

The following courses are available in a distance education format.

- COPA 103 Politics and Public Administration: Public Administration in Canada
- CPPA 301 Politics and Public Administration: Administrative Law

Public Relations

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

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

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

Admission Requirements

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

Students who have questions about the admission requirements and/or would like to know more about

this certificate are invited to attend a Program Open House. Please see Open House for dates, times, and location.

Certificate Requirements

The successful completion of the equivalent of eight 39-hour courses, with a cumulative grade point average of 2.00 or higher, is required for the certificate.

Certificate Registration

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

Requirements for Graduation

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

Recommended Sequence

CDPR 201
 CDPR 111
 CDPR 104
 CDPR 108
 CDPR 106
 CDPR 113
 CDPR 114
 CDPR 105
 CDPR 107

Required Courses

- CDPR 107 Public Relations: Public Relations Project
- CDPR 111 Public Relations: Writing for Public Relations
- CDPR 201 Public Relations: Public Relations Principles I

Electives (five 39-hour courses or equivalent combination of electives totalling 195 hours)

39-Hour Courses

- CDPR 104 Public Relations: Planning Programming and Budgeting
- CDPR 105 Public Relations: Research and Program Evaluation
- CDPR 106 Public Relations: Media Relations
- CDPR 108 Public Relations: Social Media in Public Relations
- CDPR 113 Public Relations: Internal Communications Management
- CDPR 114 Public Relations: Reputation Management

19.5-Hour Courses

Students may substitute two of the following 19.5-hour courses for any of the above 39-hour electives.

- CDPR 102 Public Relations: Business Presentations
- CDPR 103 Public Relations: Advanced PR Writing
- CDPR 115 Public Relations: Corporate Social Responsibility

Note to registered certificate program students

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

Required

CDPR 104, CDPR 105, CDPR 106, CDPR 113, and CDPR 114 are now 39-Hour Electives.

Electives

Elective groups added; students must complete five 39-hour electives or equivalent combination of electives totaling 195 hours.

CDPR 101 deleted as a 19.5-Hour Elective.

CDPR 108 added as a 39-Hour Elective.

CDPR 102, CDPR 103, and CDPR 115 added as 19.5-Hour Electives.

Distance Education

The following courses are available in a distance education format.

- CDPR 102 Public Relations: Business Presentations
- CDPR 103 Public Relations: Advanced PR Writing
- 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 108 Public Relations:
Social Media in Public Relations
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: All of the courses in this program are available by distance education.

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

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

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

Instructors

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

Awards

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

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

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

Internships

We have an extensive network of industry partnerships that provide direct links between classroom experience and a career. Visit

www.ryerson.ca/ce/publishinginternships to see the companies that may be offering industry internships to students in the program.

Admission Requirements

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

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

Notice to Students

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

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

Program Open House

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

Certificate Requirements

The successful completion of eight 39-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 39-hour courses or equivalent 19.5-hour courses required)

39-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 Stylistic Editing
- CDPB 212 Publishing: Visual Skills for Publishing
- CDPB 312 Publishing: Practical Grammar and Punctuation
- CDPB 803 Publishing: Digital Publishing and Production

19.5-Hour Courses

Students may substitute any two of the following 19.5-hour courses for any one of the above 39-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 (39-Hour Courses)

CDPB 210 and CDPB 802 deleted.
CDPB 201, CDPB 212, CDPB 312, and CDPB 803 added.

Distance Education

The following courses are available in a distance education format.

- CDPB 100 Publishing: Publishing Overview: Trade
- 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 200 Publishing: Publishing Overview: Education
- CDPB 202 Publishing: Substantive and Stylistic Editing
- CDPB 212 Publishing: Visual Skills for Publishing
- 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
- CDPB 312 Publishing: Practical Grammar and Punctuation

Quantitative Economics

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

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

Academic Coordinator: Michael Jolly,
mjolly@ryerson.ca

Admission Requirements

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

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

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Required Courses

- CECN 104 Economics: Introductory Microeconomics
- CECN 129 Economics: Statistics for Economics I
- CECN 204 Economics: Introductory Macroeconomics
- CECN 230 Economics: Mathematics for Economics
- CECN 301 Economics: Intermediate Macroeconomics I
- CECN 329 Economics: Statistics for Economics II
- CECN 627 Economics: Econometrics I
- CMTH 189 Mathematics: Introduction to Mathematics for Economics

Electives (select two)

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

Note to registered certificate program students

Required Courses

CMTH 240 deleted.

Distance Education

The following courses are available in a distance education format.

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

Residential Care for Children and Youth

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

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

Admission Requirements

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

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

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

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Required Courses

- CVCY 101 Residential Care for Children and Youth: Communications in Residential Care
- CVCY 102 Residential Care for Children and Youth: Human Growth and Development
- CVCY 103 Residential Care for Children and Youth: Principles of Group Care
- CVCY 104 Residential Care for Children and Youth: Residential Care Techniques

- CVCY 105 Residential Care for Children and Youth: Health, Ethics and Professionalism
- CVCY 200 Residential Care for Children and Youth: Reflective Practice Seminar

Retail Management

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

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

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

Admission Requirements

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

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

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Required Courses

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

Electives (select four)

- CENT 500 Entrepreneurship: New Venture Startup
- CGMS 200 Global Management: Introduction to Global Management
- CMHR 405 Human Resources: Organizational Behaviour and Interpersonal Skills
- CMHR 523 Human Resources: Human Resources Management
- CMKT 100 Marketing: Principles of Marketing

- CQMS 102 Quantitative Methods: Business Statistics I
- CRMG 301 Retail Management: Retail Operations: Processes and Value Chn
- CRMG 303 Retail Management: Service Quality Management
- CRMG 400 Retail Management: Buying Process I
- CRMG 434 Retail Management: Intro to Logistics and Supply Chain Mgmt
- CRMG 452 Retail Management: Visual Merchandising and Space Planning
- CRMG 902 Retail Management: Franchising
- CRMG 907 Retail Management: Relationship Marketing
- CRMG 909 Retail Management: Advanced Buying Process II
- CRMG 910 Retail Management: Multi-Channel Retailing
- CRMG 911 Retail Management: Retail Sales Management
- CRMG 916 Retail Management: Channel Management
- CRMG 919 Retail Management: Applied Demand Forecasting
- CRMG 925 Retail Management: Optimizing Retail Service Quality
- CZRM 100 Retail Management: Industry Project

Required Courses
(2 Courses)



CRMG 200
Intro to Retail and
Services Management

CRMG 302
Retail Consumer Insight

**Professional
Development
Achievement
Series**

Buying Stream	Operations Stream	Customized Focus
CRMG 400 Buying Process I	CRMG 301 Retail Operations: Process and Value Chn	Select a combination of any four electives, including all CRMG courses or CENT 500 CGMS 200 CMHR 405 CMHR 523 CMKT 100 CQMS 102
CRMG 452 Visual Merchandising and Planning	CRMG 303 Service Quality Management	
CRMG 909 Advanced Buying Process II	CRMG 925 Leading in Retail Services Organizations	

**Suggested
Electives**
*(Choose one
course)*

Buying Stream	Operations Stream	Customized Focus
CRMG 907 Relationship Marketing	CRMG 434 Intro to Logistics and Supply Chain Mgmt	Select a combination of any four electives, including all CRMG courses or CENT 500 CGMS 200 CMHR 405 CMHR 523 CMKT 100 CQMS 102
CRMG 910 Multi-Channel Retailing	CRMG 902 Franchising	
CRMG 916 Channel Management	CRMG 910 Multi-Channel Retailing	
CRMG 919 Retail Business Analytics	CRMG 911 Retail Sales Management	

Professional Development

You can receive an acknowledgement of professional achievement once you have successfully completed three courses as follows:

Professional Achievement Award: Retail Buying requires completion of CRMG 400, CRMG 452, and CRMG 909.

Professional Achievement Award: Retail Operations requires completion of CRMG 301, CRMG 303, and CRMG 925.

The three courses must be completed with a GPA of 2.00 or higher within three years of your registration in the first course. The courses may be applied to the Retail Management certificate (students intending to complete the certificate must register before completion of the professional designation). Those who successfully complete the courses for these course series are eligible to earn a Professional Development Award from Ryerson University. See page 155 for more information about Retail Buying and Retail Operations.

Distance Education

The following courses are available in a distance education format.

CENT 500 Entrepreneurship:
New Venture Startup

CGMS 200 Global Management:
Introduction to Global Management

CMHR 405 Human Resources:
Organizational Behaviour and Interpersonal Skills

CMHR 523 Human Resources:
Human Resources Management

CMKT 100 Marketing: Principles of Marketing

CQMS 102 Quantitative Methods:
Business Statistics I

CRMG 200 Retail Management:
Introduction to Retail Management

CRMG 302 Retail Management:
Retail Consumer Insight

CRMG 301 Retail Management:
Retail Operations: Processes and Value Chn

CRMG 303 Retail Management:
Service Quality Management

CRMG 400 Retail Management:
Buying Process I

CRMG 434 Retail Management:
Intro to Logistics and Supply Chain Mgmt

CRMG 452 Retail Management:
Visual Merchandising and Space Planning

CRMG 907 Retail Management:
Relationship Marketing

CRMG 909 Retail Management:
Advanced Buying Process II

CRMG 910 Retail Management:
Multi-Channel Retailing

CRMG 911 Retail Management:
Retail Sales Management

CRMG 916 Retail Management:
Channel Management

CRMG 919 Retail Management:
Retail Business Analytics

Course Delivery Schedule

	Fall 2012	Winter 2013	Spring/Summer 2013
Required			
CRMG 200	I	I	I
CRMG 302			I
Electives			
CENT 500	C	I	C, I
CGMS 200	C, I	C, I	C, I
CMHR 405	C, I	C, I	C, I
CMHR 523	C, I, CI	C, I, CI	C, I
CMKT 100	C, I	C, I	C, I
CQMS 102	C, I	C, I	C, I
CRMG 301		I	
CRMG 303			I
CRMG 400		I	
CRMG 434		I	
CRMG 452	I		
CRMG 902*			
CRMG 907			I
CRMG 909			I
CRMG 910		I	
CRMG 911	I		
CRMG 916	I		
CRMG 919			I
CRMG 925			
CZRM 100			

*CRMG 902 (to be offered in 2014) will alternate with CRMG 301.

C = Classroom

CI = Classroom/Internet

I = Distance Education via Internet

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

Robotics and Embedded Systems

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

This certificate program provides adult learners with hands-on opportunities to acquire knowledge and skills that will permit them to contribute and respond effectively to our collective societal need to provide innovation through advances in robotics and embedded systems product and device development. Topics covered will range from microprocessor-based control systems to systems-on-chip (SoC) design to device software development for the purposes of consumer and commercial product development in any number of fields. Participants will build as they learn, producing robotic and embedded systems throughout the duration of the program.

Admission Requirements

Mature student status and evidence of relevant college or university-level coursework, or equivalent
OR

Mature student status together with relevant industrial or professional experience

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

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Recommended Sequence

Students are advised to take the courses in the following sequence:

- CKRE 100
- CKRE 110
- CKRE 120
- CKRE 130
- CKRE 140
- CKRE 150

Required Courses

- CKRE 100 Robotics and Embedded Systems: Embedded Systems Programming
- CKRE 110 Robotics and Embedded Systems: Digital Logic and Hardware Architecture
- CKRE 120 Robotics and Embedded Systems: Programming Robotics Systems
- CKRE 130 Robotics and Embedded Systems: Embedded Systems Hardware Architecture and Implementation
- CKRE 140 Robotics and Embedded Systems: Real-Time Embedded Systems Programming
- CKRE 150 Robotics and Embedded Systems: Emerging Issues in Robotics and Embedded Systems

Social Sciences and Humanities Foundations

This certificate provides an opportunity to explore areas in social sciences and humanities and develop transferable university-level skills such as critical analysis and problem solving. Courses are based on the common first-year foundation of Ryerson's Faculty of Arts programs and may provide an opportunity for students to strengthen applications for full-time undergraduate degrees. Successfully completed courses may be considered as transfer credits to higher education degree programs, subject to admission and requirements for credit transfer.

Admission Requirements

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

Students who have not met the above requirements are required to take CENG 108 as one of their four electives. It is recommended that they take CENG 108 immediately following CSSH 205, since both courses will provide a strong foundation in the writing skills needed to complete this certificate successfully.

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

Program Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Recommended Sequence

Students are advised to take the courses in the following sequence:
CSSH 205

Electives (four selections – two from Humanities and two from Social Sciences)

CSSH 301

Students who are planning to pursue an Arts degree and who do not have an English Grade 12 U or M course with a grade of 70% or higher are required to take CENG 108 as one of their four electives. It is recommended that they take CENG 108 immediately following CSSH 205, since both courses will provide a strong foundation in the writing skills needed to complete this certificate successfully.

Required Courses

- CSSH 205 Social Sciences:
Academic Writing and Research
- CSSH 301 Social Sciences:
Research Design and Qualitative Methods

Electives (select a total of four courses)

Electives – Humanities (select two)

- CACS 100 Contemporary Study:
Ideas That Shape the World I
- CACS 200 Contemporary Study:
Ideas That Shape the World II
- CENG 108 English Literature:
The Nature of Narrative I
- CENG 208 English Literature:
The Nature of Narrative II
- CFRE *** A French course†
- CHIS 104 History:
Ten Days That Shook the World
- CHIS 105 History: Inventing Popular Culture
- CHIS 106 History:
Technology, Warfare, and Social Change
- CHIS 107 History:
Colonization, Colonialism, and Independence
- CPHL 101 Philosophy:
Plato and the Roots of Western Philosophy
- CPHL 201 Philosophy: Problems in Philosophy
- CPHL 333 Philosophy:
Philosophy: Philosophy of Human Nature
- CPHL 366 Philosophy:
Existentialism and Art and Culture
- CSPN *** A Spanish course†
- CSSH 105 Social Sciences: Critical Thinking I

† An online placement test is required. See the department's website for details: www.ryerson.ca/French-spanish/placementtest/index.html.

Electives – Social Sciences (select two)

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

- CECN 104 Economics: Introductory Microeconomics
- CECN 204 Economics: Introductory Macroeconomics
- CEUS 102 Geography: Environment and Sustainability
- CEUS 202 Geography: Sustaining the City's Environment
- CGEO 131 Geography: Energy, Earth, and Ecosystems
- CGEO 151 Geography: Location, Location, Location
- CPOG 100 Politics and Public Administration: People, Power, and Politics
- CPOG 110 Politics and Public Administration: Canadian Politics
- CPPA 101 Politics and Public Administration: Canadian Public Administration I: Institutions
- CPPA 102 Politics and Public Administration: Canadian Public Administration II: Processes
- CPSY 102 Psychology: Introduction to Psychology I
- CPSY 202 Psychology: Introduction to Psychology II
- CSOC 105 Sociology: Introduction to Sociology
- CSOC 107 Sociology: Sociology of Everyday Life
- CSSH 102 Social Sciences: Learning and Development Strategies

Distance Education

The following courses are available in a distance education format.

- CENG 108 English Literature: The Nature of Narrative I
- CECN 104 Economics: Introductory Microeconomics
- CECN 204 Economics: Introductory Macroeconomics
- CPPA 101 Politics and Public Administration: Cdn Public Administration I: Institutions
- CPPA 102 Politics and Public Administration: Cdn Public Administration II: Processes

Strategic Marketing

Formerly: Marketing Management

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

Why strategic? Because you choose the courses you need to meet your career goals. This certificate is designed to meet the needs of marketing professionals

wanting to develop expertise in a specific area or take a variety of courses to address knowledge gaps, as well as career changers wanting the fundamentals of marketing.

Admission Requirements

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

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

Admission Application

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

Program Open House

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

Certificate Requirements

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

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 to 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 600 Marketing: Integrated Case Analysis
- CMKT 700 Marketing: Business Intelligence/Decision Modeling
- CMKT 702 Marketing: Advanced Marketing Management

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 600 Marketing: Integrated Case Analysis

- CMKT 702 Marketing: Advanced Marketing Management
- CMKT 828 Marketing: Sport Marketing Concepts and Strategy
- CMKT 829 Marketing: International Sport Marketing

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 702 Marketing: Advanced Marketing Management
- 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 Marketing: International Sport Marketing
- CMKT 850 Marketing: Applied Research Project

Note to registered certificate program students

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

Students formally registered in the certificate prior to June 30, 2009, must successfully complete the published certificate curricula from the year you registered in the certificate. *Note: Some courses from the certificate were phased out over the 2010-2011 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.

Electives

Marketing Research Stream

CMKT 850 deleted.
 CMKT 600 and CMKT 702 added.

Sports Marketing Stream

CMKT 850 deleted.
 CMKT 600 and CMKT 702 added.

General Stream

CMKT 702 added.

Distance Education

The following courses are available in a distance education format.

- CITM 350 Information Technology Management: Concepts of e-Business
- CMKT 100 Marketing: Principles of Marketing
- CMKT 300 Marketing: Marketing Metrics and Analysis
- CMKT 400 Marketing: Understanding Consumers and the New Media
- CMKT 500 Marketing: Marketing Research
- CMKT 510 Marketing: Innovations in Marketing
- CMKT 702 Marketing: Advanced Marketing Management
- CMKT 723 Marketing: Marketing in the Service Industry

Sustainability Management

Formerly: Sustainability

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

The certificate consists of six courses: three required and three electives. The first required course provides conceptual, theoretical, historical, and practical frameworks for understanding how society addresses sustainability issues, and the second required course uses these frameworks to examine sustainability-related issues society faces today. The third required course is a unique capstone course where learners have the opportunity to integrate sustainability’s “Triple-Bottom Line” (TBL/3BL) or “People-Planet-Profit” (PPP) approach – this being sustainable development’s interlinking of social, economic, and environmental dimensions – by applying competencies and knowledge acquired throughout the curriculum.

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

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

Admission Requirements

Applicants must 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 Open House

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

Certificate Requirements

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

Certificate Registration

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

Requirements for Graduation

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

Required Courses

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

Electives

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

Natural Environment Electives

- CKES 130 Environmental Engineering Science: Applied Ecology
- CKES 160 Environmental Engineering Science: Waste Management
- CKES 180 Environmental Engineering Science: Site Assessment
- CKES 190 Environmental Engineering Science: Renewable Energy and Green Technology
- CKES 210 Environmental Engineering Science: Applied Environmental Analysis
- CKES 220 Environmental Engineering Science: Environmental Law and Practice

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
- CVFN 411 Food Security: Dimensions of Urban Agriculture
- CVFN 412 Food Security: Urban Agriculture Types
- CVFN 413 Food Security: Urban Agriculture Policy-Making



Elective Streams <i>(3 Courses)</i> Specialized content relevant to student's professional goals	Natural Environment	Urban Environment	Socioeconomics of Sustainability
	CKES 130 Applied Ecology	CKAR 500 Sustainable Buildings	CECN 502 Economics and Natural Resources
	CKES 160 Waste Management	CKAR 601 Building Science for Architectural Presentation and Conservation	CECN 510 Environmental Economics
	CKES 180 Site Assessment	CKAR 610 Architectural and Presentation Techniques	CFNY 404 Food Policy and Programs for Food Security
	CKES 190 Renewable Energy and Green Technology	CKLA 400 Ecology and Sustainable Landscapes	CFNY 407 Community Development and Food Security
	CKES 210 Applied Environmental Analysis	CKLA 430 The Making and Meaning of Landscapes	CHTT 510 Sustainability Tourism Development
	CKLA 450 Landscape Restoration	CKSS 201 Sustainability Topics and Trends	
	CVFN 410 Understanding Urban Agriculture		



Socioeconomics of Sustainability Electives

- CECN 502 Economics:
Economics of Natural Resources
- CECN 510 Economics:
Environmental Economics
- CFNY 404 Food Security:
Food Policy and Programs for Food Security
- CFNY 407 Food Security:
Community Development and Food Security
- CHTT 510 Hospitality and Tourism: Sustainable
Tourism Development
- CKSS 201 Sustainability:
Sustainability Topics and Trends

Note to registered certificate program students

Effective Fall 2012, the Certificate in Sustainability has been revised to Sustainability Management. After this time, students will receive the new certificate name.

Natural Environment Electives

- CKES 160 replaces CKES 123.
- CKES 180 replaces CKES 150.
- CKES 210 replaces CKES 140.
- CKES 190 and CKES 220 added.

Urban Environment Electives

CVFN 411, CVFN 412, and CVFN 413 added.

Socioeconomics of Sustainability 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
- CKES 180 Environmental Engineering Science:
Site Assessment
- CKLA 400 Landscape Design:
Ecology and Sustainable Landscapes
- CKSS 100 Sustainability:
Fundamentals in Sustainability I
- CKSS 102 Sustainability:
Capstone Experiential Learning Course
- 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

Television Production Fundamentals

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

Course Series

Arts and Entertainment Administration

This course series will provide an appropriate blend of practical and theoretical instruction in a format that managers, potential managers, and individual artists will find suitable for their experience. A key aspect of the instruction will be to address issues for both the for-profit and not-for-profit sectors of the arts and entertainment industries.

Those who successfully complete this course series are eligible to earn a Professional Development Award from Ryerson University.

Required Sequence

CDAM 100
CDAM 101
CDAM 102

Required Courses

- CDAM 100 Management of Arts and Entertainment: Making a Living in the Arts
- CDAM 101 Management of Arts and Entertainment: Communication and Promotion for the Arts
- CDAM 102 Management of Arts and Entertainment: Audience Outreach and Engagement

Business Systems Analysis

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

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

Required Courses

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

Contemporary Global Challenges and Opportunities for Change

As the pace of obtaining information increases, people's perspectives and aspirations likewise evolve, and often faster than the pace of institutional change. Professionals in many sectors now question the traditional segregation of disciplines, and are interested in working across sectors on common issues and problems. The rapid pace of globalization is also creating greater needs for transnational perspectives in many professions, as well as in responsible citizenship. Our times are marked by a growing spirit of individual concern and collective readiness to respond to the needs and potentials of a rapidly changing world. Textbook approaches to the work of distinct sectors have their place, but are no longer enough to meet the intellectual and moral demands of many adult learners. In response, The G. Raymond Chang School of Continuing Education has introduced this innovative course series.

Purpose and Concept

This course series aims to provide real-world perspectives on the crucial challenges of our time, linking technical content to essential human values. Courses will provide missing information, tools for critical thinking, and resources for change. Instruction will be balanced with opportunities for dialogue and debate. Established Canadians and newcomers from a wide range of vocations can benefit from this series, interacting on the basis of common interests and diverse but equally relevant perspectives. This approach can support proactive professionals and world citizens in improving institutional and community responses to people's real needs and aspirations.

Thematic Areas

The course series includes choices from six thematic areas, according to professional and personal interest:

- Health in the Global Context
- Education in the Global Context
- Management and Leadership in the Global Context
- Social Movements and Social Accountability
- Responding to Disasters and Refugees
- Environmental Protection and Ecological Integrity

Structure

All six thematic areas employ the same general structure:

- A first set of courses provides an overview of a current situation and pressures for change.
- A second set of courses offers a critical examination of failures and dilemmas within each thematic area.
- A third set of courses supports an exploration of solutions and new directions that go beyond traditional perspectives and utilize multidisciplinary approaches.

Delivery is organized to suit the needs of busy private-sector professionals, activists, volunteers, and community workers. Each set of courses consists of three mini courses of six hours each. Each mini course is delivered in two sessions over one week. You can opt to take all of the mini courses within a set of courses, or combine mini courses from different sets and thematic areas to suit your professional and personal interests and aspirations.

Participants will receive a Professional Development Award from Ryerson University upon successful completion of three mini courses (a total of 18 hours).

For more detailed information and current course listings, please visit www.ryerson.ca/ce/global.

Entering Foreign Markets

This course series is designed for students who wish to build on their existing cultural knowledge, language capabilities, or Canadian business experience in order to develop skills in entering foreign markets. Completion of this series will provide students with the tools to analyze foreign market opportunities and select appropriate entry mode strategies. Students will also develop the knowledge and skills required to design and implement foreign market strategies, organize overseas market operations, and develop strategies for multinational corporations. This series will also equip students with a solid understanding of the role of the Canadian government in the regulation of international trade and the competencies required to establish an export-import operation.

For more information, please visit www.ryerson.ca/ce.

The three required courses must be completed, with a GPA of 2.00 or higher, within three years of registration in the first course. Those who successfully complete this course series are eligible to earn a Professional Development Award from Ryerson University.

Required Courses

- CGMS 522 Global Management: International Marketing
- CGMS 723 Global Management: International Trade
- CGMS 724 Global Management: Management of International Enterprise

Gateway for International Professionals

International Accounting and Finance Professionals (IAFP)

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

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

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

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

Internationally Educated Dietitians Pre-registration Program (IDPP)

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

The IDPP features two main services:

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

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

The International Midwifery Pre-registration Program (IMPP)

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

- 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 practised midwifery within the past five years. It is not a re-education or re-training program. There are limited places available in the IMPP, and the admission process is competitive.

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

Internationally Educated Social Work Professionals (IESW) Program

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

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

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

- In just one year, you can achieve the following:
- increase your understanding of how social work is practiced in Ontario and the rest of Canada
 - gain social service experience and orientation to the Canadian workplace
 - expand your network of social service employers and organizations

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

Workplace Communication in Canada (WCC)

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

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

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

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

Immigration and Settlement Studies

This course series provides students with the knowledge and skills needed to serve immigrants and their families directly, create policy related to that service, or create a supportive workplace environment for diverse populations.

Those who successfully complete this course series are eligible to earn a Professional Development Award from Ryerson University.

The series will consist of four courses:

Required Courses

Three courses are required and are all available online via distance education:

- CINT 913 Interdisciplinary Studies: Issues of Migration
- CINT 914 Interdisciplinary Studies: Settlement Experiences
- CINT 915 Interdisciplinary Studies: Responses to Migration

Electives (select one)

An additional elective course can be selected from the following:

- CECN 640 Economics: The Economics of Immigration
- CGEO 691 Geography: Canadian Immigration: Patterns and Place
- CINT 905 Interdisciplinary Studies: Conflict Resolution in Community Services
- CMHR 600 Human Resources: Diversity and Equity in the Workplace
- CMHR 700 Human Resources: Cross-Cultural Dimensions of Organizational Behaviour
- CPSY 620 Psychology: Psychology of Immigration
- CPSY 941 Psychology: Cross Cultural Psychology
- CSOC 474 Sociology: Immigration, Minorities and Citizenship

For more information about the Course Series in Immigration and Settlement Studies, please view our flyer or contact June Pollard, Academic Coordinator, Interdisciplinary Studies, at jpollard@ryerson.ca.

Information Technology Studies

.NET Application Developer

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

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

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

Those who successfully complete this course series are eligible to earn a Professional Development Award from Ryerson University.

Recommended Sequence

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

Required Courses

- CXEC 300 .NET Application Developer: Programming With C# and the .NET Framework
- CXEC 304 .NET Application Developer: WCF in the .NET Framework
- CXEC 305 .NET Application Developer: Accessing Data with MS.NET
- CXEC 309 .NET Application Developer: Developing Web Applications with ASP .NET

Supplementary Courses

- CXEC 340 Enterprise Content Management: Microsoft SharePoint Web Development
- CXEC 329 Mobile Application Developer: iPhone Application Development

Note to course series students

CXEC 302 no longer offered; the number of required courses remains as four.

Certified Cisco Networking Associate (CCNA)

This two-course series provides learners with the fundamental skills and knowledge of Cisco technologies. The series may assist with your preparation for the Certified Cisco Networking Associate (CCNA).

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

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

Those who successfully complete this course series are eligible to earn a Professional Development Award from Ryerson University.

Required Courses

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

Computer Applications

This course series is intended for individuals who have an interest in keeping up with the latest and hottest computer-specific applications, technology, and software. Students may take any combination of three courses in the series, in any order.

Those who successfully complete this course series are eligible to earn a Professional Development Award from Ryerson University.

Required Courses (select three)

- CKCS 900 Computer Science: Introduction to C++
- CKCS 901 Computer Science: Introduction to Cloud Computing
- CKCS 902 Computer Science: Digital Speech Processing
- CKCS 903 Computer Science: Fundamentals of Speech Recognition
- CKCS 904 Computer Science: Introduction to Eye Tracking
- CXEC 328 Mobile Application Developer: Android Application Development
- CXEC 329 Mobile Application Developer: iPhone Application Development
- CXIT 630 Computer and Network Support: Network Administration for Linux

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 course series provides learners with 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 are familiar with the Windows environment and have proficient file management and keyboarding skills as well as experience with an office suite application. For further information about this course series, please visit www.ryerson.ca/ce/ITS.

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

Those who successfully complete this course series are eligible to earn a Professional Development Award from Ryerson University.

Recommended Sequence

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

Required Courses

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

Supplementary Courses

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

Java EE Solution Developer

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

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

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

Those who successfully complete this course series are eligible to earn a Professional Development Award from Ryerson University.

Recommended Sequence

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

Required Courses

To be eligible to be awarded the Professional Development Award, students select one of CXEC 322 or CXEC 324 for their fourth course.

- 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 324 Java EE Solution Developer: Spring and Hibernate Java Apps

Supplementary Courses

- CXEC 328 Mobile Application Developer: Android Application Development
- CXEC 329 Mobile Application Developer: iPhone Application Development

Mobile Application Developer

This two-course series provides learners with hands-on experience developing applications for Android and the iPhone, the two most popular and prominent mobile development platforms. Students will learn the skills and knowledge required to develop their own mobile applications for each device.

This course series is appropriate for learners with a programming background in Java programming (for CXEC 328), and in object-oriented programming [OOP] (for CXEC 329). For further information about this course series, please visit www.ryerson.ca/ce/ITS.

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

Those who successfully complete this course series are eligible to earn a Professional Development Award from Ryerson University.

Recommended Prerequisites

Students are strongly recommended to complete CXEC 300 or CXEC 320 (for CXEC 329) or CXEC 320 (for CXEC 328), or have equivalent OOP experience or advanced Java programming experience, prior to taking the courses in this series.

Required Courses

- CXEC 328 Mobile Application Developer: Android Application Development
- CXEC 329 Mobile Application Developer: iPhone Application Development

Website Design and Development

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

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

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

Those who successfully complete this course series are eligible to earn a Professional Development Award from Ryerson University.

Recommended Sequence

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

Required Courses

To be eligible to be awarded the Professional Development Award, students select one of CXCP 679 or CXCP 700 for their fourth course.

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

Supplementary Courses

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

Political Management

This course series is designed for individuals seeking to enhance their understanding of the opportunities and challenges in managing political offices, ranging from election activities to legislative duties and executive responsibilities. With the increasing appreciation of the importance of political management in ensuring that democratic institutions work effectively, graduates of the course series will be equipped with the knowledge required to manage core functions in political operations. Students will benefit from the flexibility of the 19.5-hour course model.

Those who successfully complete this course series are eligible to earn a Professional Development Award from Ryerson University.

Recommended Sequence

Students are advised to take COPM 701 before taking the remaining courses.

Required Courses

- COPM 701 Politics and Public Administration: Basic Electoral Strategies
- COPM 702 Politics and Public Administration: Mapping a Campaign
- COPM 703 Politics and Public Administration: The Art of Persuasion
- COPM 704 Politics and Public Administration: Fundraising
- COPM 705 Politics and Public Administration: Legislatures
- COPM 706 Politics and Public Administration: Working For a Minister

Programs for 50+

Caring Clown

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

Those who successfully complete this course series are eligible to earn a Professional Development Award from Ryerson University.

For further information about this course series, please visit www.ryerson.ca/ce/programs50plus.

Required Courses

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

Retail 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.

Those who successfully complete this course series are eligible to earn a Professional Development Award from Ryerson University.

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 and online discussions. Other topics will include teamwork, employee motivation, retail metrics, and meeting consumers' needs.

Those who successfully complete this course series are eligible to earn a Professional Development Award from Ryerson University.

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 Chain
- CRMG 303 Retail Management: Service Quality Management
- CRMG 925 Retail Management: Leading in Retail Service Organizations

Note to course series students

CRMG 900 and CRMG 901 deleted; CRMG 303 and CRMG 925 added. The number of required courses remains as three.

Urban Agriculture

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

Required Courses (all available via distance education)

- 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

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

Those who successfully complete this course series are eligible to earn a Professional Development Award from Ryerson University.

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

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