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Certificate Programs

Build real-world knowledge and career skills. Certificates offer university-level studies in your area of interest.

- [How to Register for a Certificate Program](#)
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- [View Past Certificate Course Requirements](#)

View by Areas of Study

View Alphabetically

Accounting – Finance

Advanced Accounting

Advanced Applied Digital
Geography and GIS

Advanced Architecture

Advanced Enterprise Architecture
and Infrastructure Management

Advanced International Trade
Management

Advanced Nursing Leadership and
Management

Advanced Safety Management

Aging and Gerontology

Applied Digital Geography and
GIS

Architecture

Business Communication

Business Decision Analysis

Business French and Translation

Business Management

Canadian Dietetic Knowledge
Competencies

Canadian Social Work Practice

Caribbean Studies

Community Engagement, Leadership, and Development

Computer Coding (Formerly
Computer Programming
Applications)

Crime Analytics

Criminal Justice and Criminology

Cybersecurity, Data Protection
and Digital Forensics

Data Analytics, Big Data, and
Predictive Analytics

Design Management

Design for Arts and
Entertainment

Digital Art Production

Economics and Finance

Economics: Fundamentals

Economics: Theory and
Applications

Emergency Management, Threat
and Response Planning

Energy Management and
Conservation

English Literature and Popular
Culture

Entering Foreign Markets

Entrepreneurship and Small Business

Ethics

Facility and Property
Management

Fashion Coordination and Styling

Fashion Innovation

Film Studies

Financial Mathematics Modeling
and Predictive Analytics

Financial Planning

Food Security

Foundations of International
Management

Fundamentals of Interior Design

Fundraising Management

Graphic Communications

Health Informatics

Health Services Management

Health Studies

Human Resources Management

Image Arts (with specializations
in Film Studies or Photography
Studies)

Indigenous Child and Youth Engagement

Indigenous Knowledges and Experiences

Information Systems Management

Introduction to Community Services

Landscape Design for Climate Resilience

Leadership in Organizations

Level 1 Public Administration and Governance

Level 2 Public Administration and Governance

Lighting Design

Local Economic Development

Media Writing Fundamentals

Mental Health and Addictions

Music: Global and Cultural Contexts

News Studies

Nonprofit and Voluntary Sector Management

Nursing and Interprofessional Healthcare Leadership and Management

Occupational Health and Safety

Occupational Health and Safety Leadership

Photography Studies

Practical Data Science and Machine Learning

Privacy, Access, and Information Management

Proficiency in French

Proficiency in Spanish

Project Management

Project Management for Technical Professionals

Psychology

Public Administration and Leadership

Public Relations

Publishing

Retail Management

Robotics and Embedded Systems

Social Sciences and Humanities Foundations

Strategic Marketing Management

Sustainability Management and Enterprise Process Excellence

Urban Agriculture

Accounting – Finance

Certificate

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FULLY ONLINE

Looking to pivot into the industry or looking for Canadian qualifications?

Our fully online Certificate in Accounting – Finance provides students with a gateway to opportunity — graduates leave confident that they have the relevant skills and knowledge necessary for a career in accounting, from entry-level positions to the pursuit of higher levels of certification.

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Meet Iryna: Chang School ...



Required Courses

[CACC 110 Financial Accounting](#)

Next Offered: Spring/Summer 2022

[CACC 410 Management Accounting](#)

Next Offered: Spring/Summer 2022

[CACC 414 Intermediate Accounting I](#)

Next Offered: Spring/Summer 2022

[CACC 514 Intermediate Accounting II](#)

Next Offered: Spring/Summer 2022

[CFIN 300 Managerial Finance I](#)

Next Offered: Spring/Summer 2022

[CFIN 401 Managerial Finance II](#)

Next Offered: Spring/Summer 2022

Electives (select 2)

[CACC 504 Accounting Cases and Concepts I](#)

[CACC 521 Auditing](#)

Next Offered: Spring/Summer 2022

[CACC 522 Taxation for Managers and Financial Planners](#)

Next Offered: Spring/Summer 2022

[CFIN 502 Personal Financial Planning](#)

Next Offered: Spring/Summer 2022

[CITM 102 Business Information Systems I](#)

Next Offered: Spring/Summer 2022

[CLAW 122 Business Law](#)

Next Offered: Spring/Summer 2022

[CQMS 210 Applied Statistics for Business](#)

Next Offered: Spring/Summer 2022

With courses accredited by the Chartered Professional Accounting (CPA) organization and networking opportunities with experienced professionals, this certificate provides learners with further opportunities for success and growth.

Industry and Careers

A career in accounting is full of opportunities – in any industry and across all sectors. This certificate can lead to career paths in roles such as:

- Bookkeeper
- Budget analyst
- Fund accountant
- Business or credit analyst
- Payroll officer
- Property accountant

Who Should Take This Certificate?

- College or university graduates of non-accounting fields who want to pursue the Chartered Professional Accountant (CPA) designation
- Newcomers to Canada who are seeking a Canadian university credential in accounting and finance to build their resume and help secure a job
- Working professionals with the goal of pivoting their career into accounting or finance

What Will You Learn?

After completing this certificate, you will be able to:

- Measure and report financial transactions
- Analyze financial information communicated through statements
- Identify, classify, and summarize costs and expenses
- Prepare budgets and determine variances
- Understand different cost-accounting systems
- Address problems related to cost determination, allocation, budgeting, and control

- Apply key practices of management accounting for improved business performance

Certificate Requirements

—

- 6 required courses*
- 2 electives
- Cumulative grade point average (GPA) 1.67+

*If you are an internationally educated professional who has received a waiver from CPA Ontario for CACC 110 and CACC 410, you may apply to the academic coordinator to waive these courses. If granted a waiver, you will need to complete 4 electives (instead of 2) to fulfill the certificate requirements.

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria

—

Recommended:

- Ontario Secondary School Diploma (OSSD) or equivalent
 - With 6 Grade 12 U or M credits

OR

- Mature student status with relevant professional experience in business

If you are an undergraduate student, you should be aware of possible certificate restrictions. Check [Curriculum Advising](#) [↗](#) for complete details.

Professional Designations and Accreditation

+

Awards and Financial Aid

+

Frequently Asked Questions

+

Contact Us

+

Advanced Accounting

Certificate

[Register now](#)



Continue on your path to becoming a Chartered Professional Accountant (CPA) with our Certificate in Advanced Accounting. Building on the [Certificate in Accounting – Finance](#), this program supports your career advancement in developing your technical skills in managerial accounting, finance, taxation, and IT accounting systems.

The six courses in this certificate will hone your analytical and decision-making skills, empowering you to make financial recommendations that are feasible, ethical and adhere to professional standards.

This program:

- offers in-class learning
- is eligible for OSAP
- is comprised of [CPA preparatory courses](#)
- is comprised of degree credit courses that can be used by Ryerson undergraduate students who are completing a minor in Accounting or Finance at the Ted Rogers School of Management

☒ **Not ready to enrol but want to learn more?**

Fill out this form and a representative from The Chang School will contact you.

[Express Interest](#)

Required Courses

[CACC 703 Advanced Financial Accounting](#)

Next Offered: Spring/Summer 2022

[CACC 742 Canadian Business Taxation I](#)

Next Offered: Fall 2022

[CACC 801 Intermediate Cost and Management Accounting](#)

[CACC 842 Canadian Business Taxation II](#)

Next Offered: Winter 2023

[CITM 696 Accounting Information Systems](#)

Next Offered: Spring/Summer 2022

[CLAW 603 Advanced Business Law](#)

Next Offered: Spring/Summer 2022

What Will You Learn? +

Who Should Take This Certificate? +

Who Teaches the Courses? +

Industry and Careers +

Professional Designations and Accreditation +

Frequently Asked Questions +

Certificate Requirements

—

- 6 required courses
- Cumulative grade point average (GPA) 1.67+

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria

—

Required:

- [Certificate in Accounting – Finance](#) or equivalent

AND

- All of the following courses or equivalents:
 - [CACC 504](#)
 - [CITM 102](#)
 - [CLAW 122](#)

If you are an undergraduate student, you should be aware of possible certificate restrictions. Check [Curriculum Advising](#) [↗](#) for complete details.

Awards and Financial Aid

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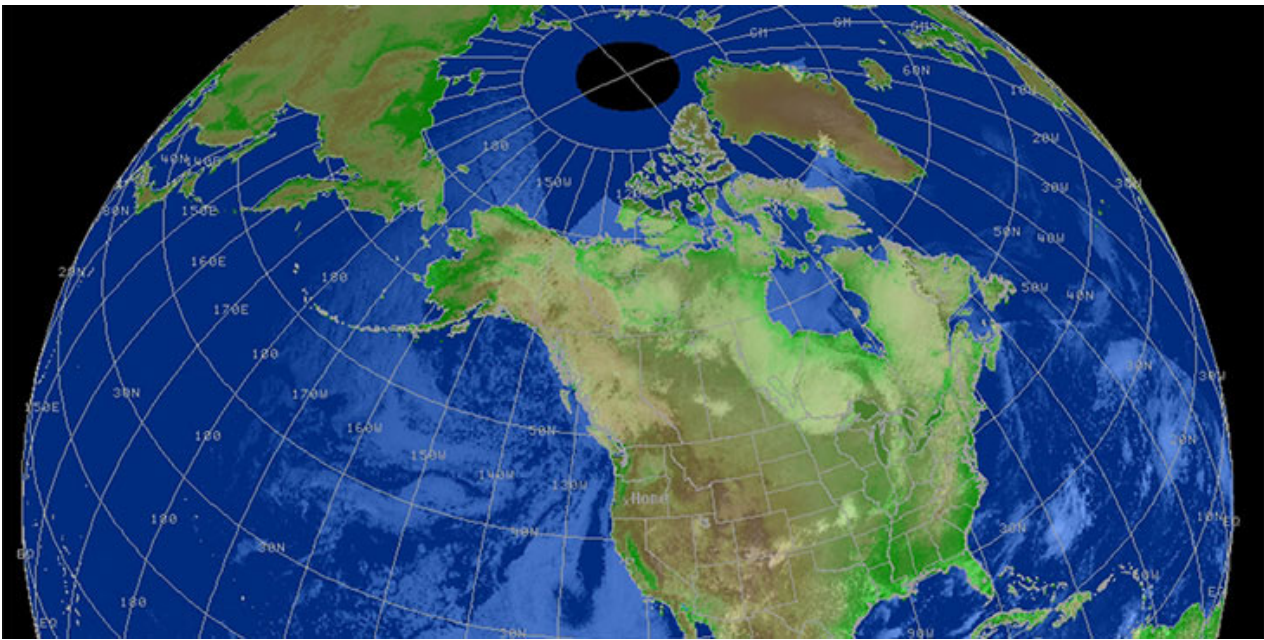
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Advanced Applied Digital Geography and GIS

Certificate



Important note: The Certificate in Advanced Applied Digital Geography and GIS will be discontinued in Fall 2022. Your final opportunity to register for this certificate program will be the Spring/Summer 2022 term; classes begin the week of May 2.

Interested in this certificate? Contact our Client Services Advisors at ce@ryerson.ca for more information.

This advanced certificate builds on the Certificate in Applied Digital Geography and GIS to provide greater conceptual understanding and technical expertise in an increasingly complex industry.

Upgrade your knowledge and skills through highly technical specialty courses in:

- spatial database management systems
- advanced programming
- spatial statistics
- GIS web services

Project-based courses consolidate the in-depth conceptual knowledge and complex skills learned in your previous courses.

Take advantage of the state-of-the-art GIS facilities offered by Ryerson University's Department of Geography and Environmental Studies – a leader in GIS education in Canada.

What Will You Learn?



Who Should Take This Certificate?



Not ready to enrol but want to learn more?

Fill out this form and a representative from The Chang School will contact you.

[Express interest](#)

Required Courses – First Level

[CODG 210 Spatial Database Management Systems](#)

Next Offered: Fall 2022

[CODG 211 Advanced GIS Programming](#)

Next Offered: Spring/Summer 2023

[CODG 212 Spatial Statistical Methods](#)

Next Offered: Winter 2023

[CODG 213 Internet GIS](#)

Next Offered: Spring/Summer 2023

Required Courses – Second Level (select 1 or 2)

You may select 1 or both of the following courses. If you choose 1, you need to complete 1 course from the Electives to fulfill the certificate requirements.

[CODG 220 GIS Implementation](#)

[CODG 221 GIS Project](#)

Electives (select 1)

This category only applies if you select 1 course from the Required Courses – Second Level. If you choose both courses, you do not need to complete this category.

[CODG 130 Legal and Ethical Issues in GIS and Digital Data](#)

[CODG 131 Issues and Innovations](#)

[CODG 132 Customizing GIS Software: Applications Programming](#)

Next Offered: Fall 2022

[CODG 133 Map Algebra: Topology and Overlay](#)

Next Offered: Fall 2022

Who Teaches the Courses?	+
Industry and Careers	+
Certificate Requirements	—
<div><div><div><div><div></div><div>6 required courses</div></div><div><div></div><div>1 elective*</div></div><div><div></div><div>Cumulative grade point average (GPA) of 1.67+</div></div></div></div><div><div>*The elective category only applies if you select 1 course from the Required Courses – Second Level category. If you choose both courses, you do not need to complete this category.</div><div>To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our Glossary of Terms. If certificate requirements change and courses are no longer available, you may request Course Substitutions/Directives. You must apply to graduate on my.ryerson (RAMSS) within the appropriate application deadlines (refer to Important Dates). Visit Graduation for details.</div></div></div>	
Admission Criteria	—
<div><div><div><div><div></div><div>Required:</div></div><div><div></div><div>Certificate in Applied Digital Geography and GIS or equivalent</div></div></div></div><div><div><div><div><div></div><div>Admission Application</div></div><div><div>You must complete an application for pre-approval and be approved before registering for your first course. 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.</div></div></div></div><div><div><div><div><div></div><div>Admission Interview/Placement Assessment</div></div><div><div>You must also complete an interview with the academic coordinator to facilitate assessment of prior learning. Official documentation of English proficiency may be required if English is not your first language.</div></div></div></div></div></div></div>	
Awards and Financial Aid	+
Contact Us	+

[CODG 135 Digital Image Processing and Applications](#)

Next Offered:Spring/Summer 2023

[CODG 136 Web Mapping](#)

Next Offered:Fall 2022

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Advanced Architecture

 Certificate



Important note: The Certificate in Advanced Architecture will be discontinued in Fall 2022. Your final opportunity to register for this certificate program will be the Spring/Summer 2022 term; classes begin the week of May 2.

Interested in this certificate? Contact our Client Services Advisors at ce@ryerson.ca for more information.

If you have completed your [Certificate in Architecture](#) or are actively engaged in an architectural field, this advanced certificate can help take your career to the next level.

Develop skills in communication, computer-aided architectural drawing using AutoCAD, sustainable building practices, and architectural preservation and conservation. Explore related topics through electives in entrepreneurship and strategy, specifications, modeling and rendering, project management, and more.

Not ready to enrol but want to learn more?

Fill out this form and a representative from The Chang School will contact you.

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[Register now](#) 

Required Courses

[CCMN 432 Communication in the Engineering Professions](#)

Next Offered: Fall 2022

[CKAR 215 Computer-Aided Architectural Drawing](#)

Next Offered: Fall 2022

[CKAR 500 Sustainable Buildings](#)

Next Offered: Fall 2022

[CKAR 601 Building Science for Architectural Preservation and Conservation](#)

Next Offered: Fall 2022

Electives (select 2)

[CENT 500 New Venture Startup](#)

Next Offered: Fall 2022

[CKAR 203 Specifications and Contractual Documents](#)

[CKAR 209 Digital Graphics for Architecture and Design](#)

[CKAR 785 Building Info Modelling \(REVIT\)](#)

Next Offered: Fall 2022

[CKPM 214 Project Development and Control](#)

Next Offered: Winter 2023

[CTEC 210 Fundamentals of Project Management](#)

Next Offered: Fall 2022

What Will You Learn?



Who Should Take This Certificate?



Who Teaches the Courses?



Industry and Careers



Certificate Requirements



- 4 required courses
- 2 electives

- Cumulative grade point average (GPA) of 1.67+

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria



Required:

- [Certificate in Architecture](#)

OR

- Equivalent academic qualifications and relevant work experience

Awards and Financial Aid



Frequently Asked Questions



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Advanced Enterprise Architecture and Infrastructure Management

 Certificate

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Hot Careers Spotlight: The Enterprise Architect



Enterprise Architects are some of the most senior and well-paid Informational Technology professionals. The occupation requires high educational attainment and the ability to understand the interdependence of organizational processes. This program will give you the advanced analytical skills to solve business problems by applying IT architecture and infrastructure, and the knowledge to enhance computer and network security in an operational environment.

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Required Courses

[CITM 410 Business Process Design](#)

Next Offered: Fall 2022

[CITM 706 Enterprise Architecture](#)

Next Offered: Fall 2022

[CITM 820 Information Systems Security and Privacy](#)

Next Offered: Fall 2022

Electives (select 1)

[CITM 330 Supply Chain Process Architecture](#)

[CITM 600 Data Communications Network Design](#)

Next Offered: Fall 2022

[CITM 711 Cloud Computing](#)

Next Offered: Fall 2022

[CITM 750 IS Project Management](#)

Next Offered: Spring/Summer 2022

Industry and Careers

This program can lead to career paths in various areas such as:

- Business analyst
- Enterprise architect

Who Should Take This Certificate?

- Graduates from the following programs who want to develop a specialty in Enterprise Architecture:
 - Engineering degree
 - IT-related degree or diploma
 - Master of Business Administration
 - The Chang School's Certificate in Information Systems Management
- Professionals currently working in the following areas who seek a specialized role in Enterprise Architecture:
 - business analytics
 - database development
 - engineering
 - network administration
 - software development
 - security administrator

Students should have an Information Systems Management (ISM) certificate or an IT educational background at college or university levels.

What Will You Learn?

This advanced certificate program offers students the knowledge and necessary tools for determining how an organization can effectively achieve its current and future objectives. It offers IT-enabled business process management from an analytical perspective. This analytical capability is enriched with advanced topics in information systems security and privacy.

After completing this certificate, you will able to:

- advise organizations on how to respond to emerging technologies and the growing complexity of information systems
- develop and manage information technology architecture and infrastructure to meet the strategic needs of business and government
- analyze and solve business problems by applying information technology architecture and infrastructure
- understand the context of enterprise architecture frameworks, including:
 - the open group architecture framework (togaf)
 - service-orientate architecture (soa)
 - control objectives for information and related technologies (cobit)
 - zachman

Certificate Requirements

- 3 required courses
- 1 elective
- Cumulative grade point average (GPA) 1.67+

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria

Recommended:

- Ontario Secondary School Diploma (OSSD) or equivalent
 - With 6 Grade 12 U or M credits

AND

- All of the following courses or equivalents:
 - [CITM 100](#) or [CITM 102](#)
 - [CITM 207](#)
 - [CITM 301](#)

If you are an undergraduate student, you should be aware of possible certificate restrictions. Check [Curriculum Advising](#) [↗](#) for complete details.

Awards and Financial Aid

Contact Us

Advanced International Trade Management

Certificate

Register now ➤



With its diverse set of actors and interests, international trade has always been complex. Yet, in today's political and economic climate, even the most solid international trade agreements – as well as the institutions and norms necessary to facilitate trade – are in flux.

This certificate program provides an advanced understanding of the current international trade environment and develops the analytical skills necessary to assess business risk in international transactions.

This program:

- offers a mix of online and in-class learning
- is eligible for OSAP
- is comprised of degree-credit courses

☒ Not ready to enrol but want to learn more?

Fill out this form and a representative from The Chang School will contact you.

Express interest [↗](#)

Required Courses —

[CGMS 723 International Trade](#)

Next Offered: Spring/Summer 2022

[CGMS 724 Management of International Enterprise](#)

Next Offered: Spring/Summer 2022

[CGMS 802 Ethics and Regulation of Int'l Bus](#)

Electives (select 2) —

[CECN 104 Introductory Microeconomics](#)

Next Offered: Spring/Summer 2022

[CGMS 400 The Global Business Environment](#)

[CGMS 450 Project Management](#)

[CLAW 122 Business Law](#)

Next Offered: Spring/Summer 2022

[CLAW 724 Legal Aspects of International Business](#)

Next Offered: Spring/Summer 2022

What Will You Learn? +

Who Should Take This Certificate? +

Who Teaches the Courses? +

Industry and Careers +

Frequently Asked Questions +

Certificate Requirements —

- Three required courses

- Two electives
- Cumulative grade point average (GPA) 1.67+

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria

—

Recommended:

- [Certificate in Foundations of International Management](#) or equivalent

AND

- All of the following courses or equivalents:
 - [CGMS 200](#)
 - [CGMS 401](#)
 - [CQMS 102](#)

If you are an undergraduate student, you should be aware of possible certificate restrictions. Check [Curriculum Advising](#) [↗](#) for complete details.

Awards and Financial Aid

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Advanced Nursing Leadership and Management

Certificate

FULLY ONLINE

The Certificate in Advanced Nursing Leadership and Management will not be accepting any new registrants. The certificate has been discontinued effective Fall 2020. Students formally registered in the certificate prior to July 1, 2020 must complete the program requirements in effect at the time they registered.

Students are welcome to enrol in the new [Nursing and Interprofessional Healthcare Leadership and Management](#) certificate, starting in Fall 2020.

For curriculum details, please refer to the [archived calendar](#) for your year of registration.

For further information, please contact Jouanna Labib, Student Affairs/Program Advisor.
Email: jlabib@ryerson.ca

Register now

Required Courses

[CVNU 360 Advanced Leadership and Management](#)

Next Offered: Fall 2022

[CVNU 370 Change and Innovation](#)

Next Offered: Winter 2023

Electives – Group A: Program Planning and Evaluation (select 1)

[CHSM 408 Program Planning and Evaluation](#)

Next Offered: Winter 2023

[CINP 902 Evaluation for Nonprofits](#)

Next Offered: Fall 2022

[CINT 900 Program Planning and Evaluation Strategies](#)

Next Offered: Fall 2022

[CPPA 402 Program Planning and Evaluation](#)

Next Offered: Winter 2023

Electives – Group B: Leadership (select 1 or 2)

[CINT 905 Conflict Resolution in Community Services](#)

Next Offered: Spring/Summer 2022

[CINT 907 Team Work for Community Services](#)

Next Offered: Fall 2022

[CINT 911 International Community Development](#)

Next Offered: Winter 2023

[CMHR 741 Managing Interpersonal Dynamics and Teams](#)

Electives – Group C: Management (select 1 or 2)

[CHIM 300 Managing Health Information Services](#)

[CHSM 301 The Healthcare Systems](#)

Next Offered: Fall 2022

[CHSM 305 The Management Cycle](#)

Next Offered: Fall 2022

[CHSM 307 Principles of Long Term Care Service Del.](#)

Next Offered: Winter 2023

[CHSM 437 Human Resources Management in Healthcare](#)

Next Offered: Fall 2022

[CINP 915 Financial Management for Nonprofits](#)

Next Offered: Winter 2023

[CINT 920 Community Collaborations](#)

Next Offered: Fall 2022

[CKPM 203 Planning and Scheduling](#)

Next Offered: Fall 2022

[CKPM 209 Project Risk and Quality Management](#)

Next Offered: Fall 2022

[CLAW 326 Law for Health Managers](#)

Next Offered: Fall 2022

[CMHR 650 Management of Change](#)

[CMHR 721 Negotiation and Conflict Resolution](#)

[CMHR 841 Organization Theory and Design](#)

[CSWP 934 Community Engagement Foundations](#)

Next Offered: Fall 2022

[CSWP 936 Community Engagement Practices](#)

Next Offered: Fall 2022

[CTEC 210 Fundamentals of Project Management](#)

Next Offered: Fall 2022

[CVNU 321 Financial Management](#)

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Advanced Safety Management

Certificate

FULLY ONLINE



Note to students already registered in this certificate program: Effective Fall 2020, the Certificate in Advanced Safety Management has been revised. Students who were formally registered in the certificate prior to July 2, 2020, must complete the curriculum requirements that were in effect at the time of their registration. For curriculum details, please refer to the [archived calendar](#) for your year of registration. For students who registered after July 2, 2020 or have yet to register for this certificate program, the information found on this page is the current curriculum requirements.

Gain the tools and expertise you need to become an occupational health and safety (OHS) professional. Develop an understanding of advanced safety-specific topics and meet a growing demand across industries.

Acquire the skills to analyze and apply accident theory, evaluate safety and control measures, and put systems management approaches into practice to ensure safe workplaces.

You can choose to complete this certificate program on campus, through online courses, or through a combination of both modes.

Courses are drawn from Ryerson University's Bachelor of Applied Science in Occupational and Public Health (BASc). **Courses completed as part of this Certificate may be recognized towards the completion of** the BASc. Offered through the School of Occupational and Public Health, the BASc is the only degree-level program of its kind in Canada.

By completing this program after the [Certificate in Occupational Health and Safety](#), and then continuing on to the [Certificate in Occupational Health and Safety Leadership](#), you will meet the education components required for certification as a Canadian Registered Safety Professional (CRSP).

Register now

Required Courses

[COHS 323 Accident Theory](#)

Next Offered: Fall 2022

[COHS 516 Ergonomics](#)

Next Offered: Fall 2022

[COHS 523 Safety Evaluation Techniques](#)

Next Offered: Fall 2022

[COHS 623 Safety Control Methods](#)

Next Offered: Winter 2023

[COHS 709 Fire and Radiation Safety](#)

Next Offered: Winter 2023

[COHS 800 Sectoral Applications](#)

Next Offered: Winter 2023

Electives (select 2)

[CINT 900 Program Planning and Evaluation Strategies](#)

Next Offered: Fall 2022

[CINT 902 Disability Issues](#)

Next Offered: Fall 2022

[CINT 905 Conflict Resolution in Community Services](#)

Next Offered: Spring/Summer 2022

Not ready to enrol but want to learn more?

Fill out this form and a representative from The Chang School will contact you.

Express Interest

Note to students registered in this certificate program: Effective Fall 2020, the Certificate in Advanced Safety Management has been revised. Students who were formally registered in the certificate prior to July 2, 2020, must complete the curriculum requirements that were in effect at the time of their registration. For curriculum details, please refer to the [archived calendar](#) for your year of registration. **Please see the scheduling chart in Frequently Asked Questions for courses offered as part of previous curriculum.**

What Will You Learn?	+
Industry and Careers	+
Who Should Take This Certificate?	+
Who Teaches the Courses?	+
Professional Designations and Accreditation	+
Testimonials	+
Certificate Requirements	—
<div><ul style="list-style-type: none">6 required courses2 electivesCumulative grade point average (GPA) 1.67+<p>To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our Glossary of Terms. If certificate requirements change and courses are no longer available, you may request Course Substitutions/Directives. You must apply to graduate on my.ryerson (RAMSS) within the appropriate application deadlines (refer to Important Dates). Visit Graduation for details.</p></div>	
Admission Criteria	—
<div><p>Recommended:</p><ul style="list-style-type: none">Certificate in Occupational Health and Safety or equivalent<p>OR</p><ul style="list-style-type: none">Ontario Secondary School Diploma (OSSD) or equivalent<ul style="list-style-type: none">With six Grade 12 U or M credits<p>OR</p><ul style="list-style-type: none">Mature student status and five years of professional experience in occupational health and safety, plus the following courses:<ul style="list-style-type: none">COHS 208COHS 718<p>If you are an undergraduate student, you should be aware of possible certificate restrictions. Check Curriculum Advising ↗ for complete details.</p></div>	
Awards and Financial Aid	+
Frequently Asked Questions	+

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Aging and Gerontology

Certificate

FULLY ONLINE

In the next decade, it's expected that older adults will represent a quarter of the Canadian population, according to Statistics Canada. This demographic shift will present unprecedented opportunities for those serving our aging population. It also means that most professionals will work with older people. Equip yourself with the skills to meet the unique needs of this growing demographic through the application of gerontology theory, practice, and policy change.

Get Connected



Learn directly from professionals with extensive community experience in gerontology across a vast array of fields, including social work, health sciences, nursing, and more. Expand your hands-on experience, apply your professional knowledge, and make a difference in your field and community.

Industry and Careers

This certificate can lead to career paths in roles such as:

- Family counsellor
- Legal advocate
- Occupational therapist
- Psychogeriatric case manager
- Recreation specialist
- Research and community engagement coordinator
- Residential support worker
- Social worker
- Ultrasound technician
- Wellness consultant

Who Should Take This Certificate?

- Recent graduates of health, social work, counseling, sociology, and psychology who are looking to start a career working with older adults
- Individuals working as educational or public administrators, retirement housing managers, recreational/health consultants, and human resource coordinators who need to build their skill set so they can design programs and develop policies for older adults

What Will You Learn?

After completing this certificate, you will able to:

- Examine the implications of aging and evaluate the services available for aging populations in Canada and globally from the following a variety of perspectives

Register now

Required Courses

[CINT 901 Gerontology: Critical Issues and Future Trends](#)

Next Offered: Fall 2022

[CINT 930 Aging: From Cells to Society](#)

Next Offered: Fall 2022

[CINT 935 Ethical/Legal Frameworks in Aging](#)

Next Offered: Winter 2023

[CINT 940 Mobilizing Research for Change](#)

Next Offered: Winter 2023

Electives (select 2)

[CHSM 307 Principles of Long Term Care Service Del.](#)

Next Offered: Winter 2023

[CINT 555 Special Topics in Interdisciplinary Studies](#)

Next Offered: Winter 2023

[CINT 900 Program Planning and Evaluation Strategies](#)

Next Offered: Fall 2022

[CINT 904 Health Promotion and Community Development](#)

Next Offered: Fall 2022

[CINT 907 Team Work for Community Services](#)

Next Offered: Fall 2022

[CINT 945 Technology and Aging Populations](#)

Next Offered: Fall 2022

[CINT 950 Practicum/Project in Gerontology](#)

Next Offered: Fall 2022

populations in Canada and globally from the following a variety of perspectives,

including social, political, psychological, demographic, and more

- Influence practice and policy change in the field of aging
- Identify how technological innovation influences health and social engagement within aging populations
- Practice well-honed leadership, conflict management, and customer service skills

Certificate Requirements

- 4 required courses
- 2 electives
- Cumulative grade point average (GPA) of 1.67+

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria

Recommended:

- Ontario Secondary School Diploma (OSSD) or equivalent
 - With 6 Grade 12 U or M credits

OR

- Mature student status

Awards and Financial Aid

Frequently Asked Questions

Contact Us

[Ryerson University has changed its name. Find out more.](#)

Applied Digital Geography and GIS

Certificate

Register now

FULLY ONLINE

Advance your career with enhanced professional skills in digital geography and geographic information systems (GIS). Geographic information systems are used by a growing number of businesses, industries, and government organizations to help them make more informed decisions. Our certificate will help you to gain enhanced computer literacy in the management and analysis of digital spatial data, and to use that data effectively in decision-making – the skills needed to become a successful GIS professional.



Get Connected

Learn principles and concepts of digital geography and fundamental GIS skills. In the certificate program, you will focus on specific specialties and workplace applications, GIS tools, and implementation issues.

Industry and Careers

The GIS field has experienced substantial growth over the past two decades. GIS are used in government, industry, utilities, planning, municipal services, health, and retailing.

This certificate can lead to a career in various roles. Here are some examples:

- Crime analyst
- Decision support analyst/specialist
- GIS analyst/specialist/technician
- Location analyst
- Research analyst
- Spatial database technician

Who Should Take This Certificate?

- Recent university graduates who are interested in starting a career in the GIS industry
- Professionals in other fields who are interested in pivoting to a career as a GIS professional

What Will You Learn?

After completing this certificate, you will be able to:

- Understand geographic databases, visualization, digital geography, system components
- Identify GIS applications in business, municipalities, utilities, environmental management, and community and social services

Required Courses

[CODG 101 Spatial Databases and Digital Cartography](#)

Next Offered: Fall 2022

[CODG 102 Digital Geography and Spatial Analysis](#)

Next Offered: Fall 2022

Electives – Group A (select 1 or 2)

These professional applications courses allow you to focus on an area of interest.

[CODG 123 Digital Geography Applications in Utilities Planning](#)

Next Offered: Winter 2023

[CODG 124 Digital Geography Applications in Business Decision-Making](#)

Next Offered: Spring/Summer 2023

[CODG 125 Digital Geography Applications for the Municipal Professional](#)

Next Offered: Fall 2022

[CODG 126 Digital Geography Applications in Environmental Management](#)

Next Offered: Winter 2023

[CODG 127 Digital Geography Applications in Community and Social Services](#)

Electives – Group B (select 2 or 3)

These courses are designed to provide you 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.

- Understand and address legal and ethical issues, innovations in GIS, GIS programming, map algebra, digital image processing, web mapping, and more

Certificate Requirements

- 2 required courses
- 4 electives*
- Cumulative grade point average (GPA) of 1.67+

*Electives are divided into 3 groups, allowing you to focus on an area of interest and then dive into more specialized skills. Select 1 or 2 electives from Group A and 2 or 3 electives from Group B; alternatively, as the final course for certificate completion, you may choose to take 1 elective from Group C.

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria

Required:

An undergraduate degree or college diploma in an acceptable related field.

Admission Application

You must complete an application for pre-approval and be approved before registering for your first course. 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.

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 are 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.

Awards and Financial Aid

Contact Us

[CODG 130 Legal and Ethical Issues in GIS and Digital Data](#)

[CODG 131 Issues and Innovations](#)

[CODG 132 Customizing GIS Software: Applications Programming](#)

Next Offered: Fall 2022

[CODG 133 Map Algebra: Topology and Overlay](#)

Next Offered: Fall 2022

[CODG 135 Digital Image Processing and Applications](#)

Next Offered: Spring/Summer 2023

[CODG 136 Web Mapping](#)

Next Offered: Fall 2022

Electives – Group C (select up to 1)

This category only applies if you select a total of 3 electives from Groups A and B (combined), and wish to take 1 of the following electives as your final course for certificate completion.

[CODG 210 Spatial Database Management Systems](#)

Next Offered: Fall 2022

[CODG 211 Advanced GIS Programming](#)

Next Offered: Spring/Summer 2023

[CODG 212 Spatial Statistical Methods](#)

Next Offered: Winter 2023

[CODG 213 Internet GIS](#)

Next Offered: Spring/Summer 2023

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Architecture

 Certificate

Register now



If you want to enter the dynamic field of architecture, or if you already work in architecture and want to improve your skills and credentials, you may be interested in the Certificate in Architecture.

Develop skills in architectural drawing and drafting, design, space planning, and human-interface and environmental systems. Learn more about building construction methods and materials, codes and regulations, and the interconnected systems that make up buildings. Build on your practical architecture competencies through studio and workshop courses. Explore related topics through electives in entrepreneurship and strategy, sustainability, project management, and more.

Note to students registered in this certificate program: Effective Fall 2020, the Certificate in Architecture has been revised. Students who were formally registered in the certificate prior to July 2, 2020, must complete the curriculum requirements that were in effect at the time of their registration. For curriculum details, please refer to the [archived calendar](#) for your year of registration.

Not ready to enrol but want to learn more?

Fill out this form and a representative from The Chang School will contact you.

Express interest

Required Courses

[CKAR 103 Architectural Studio - Fundamental](#)

[CKAR 205 Building Codes and Regulations](#)

Next Offered: Fall 2022

[CKAR 300 Architectural Drawing](#)

[CKAR 310 Materials and Methods](#)

Next Offered: Fall 2022

Electives (select 2)

[CENT 500 New Venture Startup](#)

Next Offered: Fall 2022

[CKAR 209 Digital Graphics for Architecture and Design](#)

[CKAR 500 Sustainable Buildings](#)

Next Offered: Fall 2022

[CKAR 785 Building Info Modelling \(REVIT\)](#)

Next Offered: Fall 2022

[CTEC 210 Fundamentals of Project Management](#)

Next Offered: Fall 2022

What Will You Learn?



Who Should Take This Certificate?



Who Teaches the Courses?



Industry and Careers



Certificate Requirements



- 4 required courses
- 2 electives
- Cumulative grade point average (GPA) of 1.67+

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Recommended Course Sequence



Admission Criteria



Recommended:

- A post-secondary undergraduate education (university or college) in a relevant field of study (including programs related to architecture and/or environmental sciences)

Awards and Financial Aid



Frequently Asked Questions



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Business Communication

Certificate

[Register now](#)

Real World Expertise - Professional Communication



Learn the skills, strategies, and theories to succeed in all areas of business communication. Explore how to write concise letters, prepare efficient reports, interact effectively with others, and deliver powerful, stress-free presentations.

Develop a high level of competence in communication for business and government organizations.

This program's **hands-on approach** will help you review communication and language basics and expand your skills in:

- documentation formatting
- research
- critical thinking
- problem solving
- public speaking

Learn from instructors with real-world experience, who share their expertise in communicating in today's global workplace.

This program offers the following benefits:

- Enrol right away – open admissions with no application required
- Take Ryerson degree-credit courses
- Apply for merit-based awards

Want to find out more about the **Certificate in Business Communication?** Express interest to connect with this program and receive updates.

[Express interest](#)

Required Courses

[CCMN 279 Introduction to Professional Communication](#)

Next Offered: Fall 2022

[CCMN 313 Organizational Report Writing](#)

Next Offered: Winter 2023

[CCMN 314 Professional Presentations](#)

Next Offered: Fall 2022

[CCMN 413 Corporate Communications](#)

Next Offered: Fall 2022

[CCMN 414 Interpersonal Communication in Management](#)

Next Offered: Fall 2022

[CCMN 443 Contemporary Intercultural Communication](#)

Next Offered: Fall 2022

Electives (select 2)

[CCMN 114 Short Management Reports](#)

Next Offered: Fall 2022

[CCMN 315 Issues in Organizational Communication](#)

Next Offered: Fall 2022

[CCMN 447 Communication and Law](#)

[CDCM 300 Communicating in Virtual Environments](#)

[CDCM 415 Promotional Communications](#)

Next Offered: Fall 2022

[CFRE 502 Communication and Business French](#)

What Will You Learn?



Who Should Take This Certificate?



Who Teaches the Courses?



Industry and Careers	+
Certificate Requirements	—
<ul style="list-style-type: none">6 required courses2 electivesCumulative grade point average (GPA) of 1.67+ <p>To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our Glossary of Terms. If certificate requirements change and courses are no longer available, you may request Course Substitutions/Directives. You must apply to graduate on my.ryerson (RAMSS) within the appropriate application deadlines (refer to Important Dates). Visit Graduation for details.</p>	
Admission Criteria	—
<p>Recommended:</p> <ul style="list-style-type: none">Ontario Secondary School Diploma (OSSD) or equivalent<ul style="list-style-type: none">With 6 Grade 12 U or M credits (including English)With a minimum average of 60 percent <p>OR</p> <ul style="list-style-type: none">Mature student status	
Awards and Financial Aid	+
Why Register for the Certificate?	+
Contact Us	+

Business Decision Analysis

Certificate

[Register now](#) ➤



The demand for specialists in data analytics is growing. Organizations worldwide continue to realize the potential of harvesting data to gain a competitive edge.

Up your game with our Certificate in Business Decision Analysis. Learn to identify and define particular business issues, ask the right questions, and use quantitative analysis to support your organization's business goals. Grounded in statistics, mathematics, and computer modeling, this program is designed to develop your skills in effectively using quantitative data for managerial decision-making, across the organization, to improve business outcomes.

Not ready to enrol but want to learn more?

Fill out this form and a representative from The Chang School will contact you.

[Express interest](#) 

This program:

- offers both online and in-class learning
- is eligible for OSAP
- is comprised of degree credit courses
- offers students the opportunity to apply all, or most, of the credit earned through the certificate as transfer credits to a Bachelor of Commerce program at Ryerson or at other universities (subject to admission and the requirements of the degree to which you are applying)

Note to students registered in this certificate program: Effective Fall 2020, the Certificate in Business Decision Analysis has been revised. Students who were formally registered in the certificate prior to July 2, 2020, must complete the curriculum requirements that were in effect at the time of their registration. For curriculum details, please refer to the [archived calendar](#) for your year of registration.

Required Courses

[CQMS 210 Applied Statistics for Business](#)

Next Offered: Spring/Summer 2022

Electives (select 4)

[CGMS 422 Quality Management](#)

Next Offered: Spring/Summer 2022

[CIND 123 Data Analytics: Basic Methods](#)

Next Offered: Spring/Summer 2022

[CITM 501 Prescriptive Analytics and Simulation](#)

[CQMS 442 Multiple Regression for Business](#)

Next Offered: Spring/Summer 2022

[CQMS 521 Business Optimization](#)

[CQMS 703 Business Forecasting Techniques](#)

Next Offered: Spring/Summer 2022

Who Should Take This Certificate?	+
Who Teaches the Courses?	+
Industry and Careers	+
Testimonial	+
Frequently Asked Questions	+
Certificate Requirements	—
<ul style="list-style-type: none">• 1 required course• 4 electives• Cumulative grade point average (GPA) of 1.67+ <p>Supplies to be purchased by the student:</p> <p>A calculator with specialized statistical features is integral to many Quantitative Methods courses. Software and calculator specifications will be announced at the first class.</p> <p>To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our Glossary of Terms. If certificate requirements change and courses are no longer available, you may request Course Substitutions/Directives. You must apply to graduate on my.ryerson (RAMSS) within the appropriate application deadlines (refer to Important Dates). Visit Graduation for details.</p>	
Admission Criteria	—
<p>Recommended:</p> <ul style="list-style-type: none">• Ontario Secondary School Diploma (OSSD) or equivalent<ul style="list-style-type: none">◦ With 6 Grade 12 U or M credits (including Mathematics) <p>OR</p> <ul style="list-style-type: none">• Mature student status with relevant professional experience in business <p>If you are an undergraduate student, you should be aware of possible certificate restrictions. Check Curriculum Advising ↗ for complete details.</p>	
Professional Development	+
Awards and Financial Aid	+
Contact Us	+

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Business French and Translation

Certificate



Do you currently work or plan to work in a French business environment? This wide range of specialized and practical French language courses can help you improve your communication and translation skills.

Many of our students work in finance, banking, or government, and wish to improve their abilities in French. Some teach French courses and want to improve their business and translation skills. No matter your goals, this certificate can add to your professional qualifications and enhance your career opportunities.

If you are already proficient or fluent in French and wish to increase your business French and translation skills, this is the certificate for you.

Not ready to enrol but want to learn more?

Fill out this form and a representative from The Chang School will contact you.

Express interest

Register now

Required Courses

- [CFRE 502 Communication and Business French](#)
- [CFRE 507 English-French Translation I](#)
- [CFRE 602 Business French in Practice](#)
- [CFRE 607 English-French Translation II](#)
- [CFRE 707 Introduction to French-English Translation](#)

Electives (select 1)

- [CFRE 510 Effective Writing](#)
- [CFRE 515 Introduction to Business French](#)
- [CFRE 610 Cultural Context of Writing](#)
- [CFRE 706 The Life and Times of the French Language](#)

What Will You Learn?

Who Should Take This Certificate?

Who Teaches the Courses?

Industry and Careers

Certificate Requirements

- 5 required courses
- 1 elective*
- Cumulative grade point average (GPA) 1.67+

*You may be exempted from completing the elective if your level (as determined by placement assessment) is deemed more advanced. If granted advanced placement, you only need to complete the 5 required courses to fulfill the certificate

requirements.

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Recommended Course Sequence



Admission Criteria



Recommended:

- [Certificate in Proficiency in French](#) from Ryerson

OR

- Admission by [placement assessment](#)

If you are an undergraduate student, you should be aware of possible certificate restrictions. Check [Curriculum Advising](#) [↗](#) for complete details.

Placement Assessment



Awards and Financial Aid



Contact Us



Business Management

Certificate

Register now ➤

FULLY ONLINE

Expand your career options by building your foundational business skills through our Certificate in Business Management. The degree-credit courses in this certificate are OSAP-eligible, and many can be transferred as credits to a Bachelor of Commerce degree. Whether you're looking to start your career in business or pivot into this field, this certificate will help you carve that path.

The Certificate in Business Management comprises eight required courses that introduce you to the foundational areas of study necessary for a career in business.



Get Connected ➤

Industry and Careers

The top industries in Canada that require business management roles include the following*:

- Accommodation and food services
- Educational services
- Finance and insurance
- Healthcare and social assistance
- Manufacturing
- Professional, scientific, and technical services
- Public administration
- Retail trade

*Burning Glass, 2021

Who Should Take This Certificate?

- Individuals who want to gain foundational business skills to expand their career options, but who may not want to commit to a full-time degree program
- Individuals who are interested in business and looking to change careers
- Individuals who are interested in starting their own business in the future

What Will You Learn?

After completing this certificate, you will be able to do the following:

- Understand and analyze financial information communicated through financial statements
- Know the fundamentals of marketing, including theories, principles, and concepts of

Required Courses

You may only select one of CACC 100 or CACC 110. If you plan to pursue the Accounting Finance minor, you should take CACC 110. **Note:** CACC 100 and CACC 110 are not transferable to the Accounting major in the School of Accounting and Finance at Ryerson University.

You may only select one of CITM 100 and CITM 102.

CACC 100 Introductory Financial Accounting

Next Offered: Spring/Summer 2022

CACC 110 Financial Accounting

Next Offered: Spring/Summer 2022

CECN 104 Introductory Microeconomics

Next Offered: Spring/Summer 2022

CGMS 200 Introduction to Global Management

Next Offered: Spring/Summer 2022

CITM 100 Foundations of Information Systems

CITM 102 Business Information Systems I

Next Offered: Spring/Summer 2022

CLAW 122 Business Law

Next Offered: Spring/Summer 2022

CMHR 523 Human Resources Management

Next Offered: Spring/Summer 2022

CMKT 100 Principles of Marketing

Next Offered: Spring/Summer 2022

CQMS 110 Applied Mathematics for Business

Next Offered: Spring/Summer 2022

market and consumer behaviour

- Identify concepts and complexities of the contemporary business environment with an emphasis on competitiveness, quality, and the main functional areas of business (including marketing, accounting, economics, information management, law, and human resources management)
- Understand the fundamentals of economics including the basic concepts of demand and supply, the theory of the firm, and distribution of income
- Recognize and understand business behaviour and decision-making under various market conditions: pure competition, oligopoly, monopolistic competition, and monopoly

Certificate Requirements

—

- 8 required courses
- Cumulative grade point average (GPA) of 1.67+

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria

—

Recommended:

- Ontario Secondary School Diploma (OSSD) or equivalent
 - With 6 Grade 12 U or M credits

OR

- Mature student status with relevant professional experience in business

If you are an undergraduate student, you should be aware of possible certificate restrictions. Check [Curriculum Advising](#) [↗](#) for complete details.

Awards and Financial Aid

+

Contact Us

+

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Canadian Dietetic Knowledge Competencies

Certificate

Register now



This program is not currently accepting applications. Scheduling information is not available at this time. Please check back in Fall 2022 for further updates on the program offerings.

Are you an internationally educated professional in nutrition? Are you looking to practise as a Registered Dietitian in Canada?

The Internationally Educated Professionals in Nutrition (IEPN) program has two parts: the 10-course Certificate in Canadian Dietetic Knowledge Competencies and the practicum year. The certificate program is currently offered every other year; the next anticipated start date is to be announced.

The certificate bridges your foundational dietetic knowledge to the Canadian context, and provides a Canadian university credential to supplement your international university education. The certificate also means you are eligible to apply for the practicum year, which focuses on bridging your practice-based competencies to the Canadian context.

The College of Dietitians of Ontario regulates the dietetic profession in Ontario, and administers the [Prior Learning and Assessment Recognition \(PLAR\) process](#) for internationally educated professionals in nutrition. The College recognizes successful completion of the certificate as equivalent to a [Knowledge and Competencies Assessment Tool \(KCAT\)](#) Level I result, and successful completion of the practicum year as equivalent to successful completion of the [Performance-Based Assessment \(PBA\)](#). Both are required to be eligible to write the [Canadian Dietetic Registration Examination \(CDRE\)](#).

Required Courses

[CFNN 202 Public Health Nutrition](#)

[CFNN 301 Intro to Nutrition
Management of Human Disease](#)

[CFNN 400 Advanced Nutrition
and Health](#)

[CFNN 401 Advanced Nutrition
Management of Human Disease](#)

[CFNP 100 Introduction to
Professional Practice](#)

[CFNP 350 Interpersonal
Comm/Counselling Nutrition](#)

[CFNP 550 Introduction to
Dietetics Practice](#)

[CFNR 201 Research Methods and
Statistics](#)

[CFNS 200 Quantity Food
Management](#)

[CFNS 400 Food Service Systems
Management](#)

What Will You Learn?



Who Should Take This Certificate?



Who Teaches the Courses?



Industry and Careers



Professional Designations and Accreditation	+
Certificate Requirements	—
<ul style="list-style-type: none">10 required coursesCumulative grade point average (GPA) of 1.67+ <p>To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our Glossary of Terms. If certificate requirements change and courses are no longer available, you may request Course Substitutions/Directives. You must apply to graduate on my.ryerson (RAMSS) within the appropriate application deadlines (refer to Important Dates). Visit Graduation for details.</p>	
Admission Criteria	—
<p>Required:</p> <ul style="list-style-type: none">An assessment completed by the College of Dietitians of Ontario (CDO)<ul style="list-style-type: none">And proof of English proficiency at the required level <p>For the CDO assessment, eligible applicants must have written the Knowledge and Competency Assessment Tool (KCAT) ↗ exam within the context of The College of Dietitians of Ontario Competency Assessment ↗.</p> <p>Admission Application</p> <p>An admission application is required for this program. A two-step pre-approval process will be conducted by the program coordinator including submission of an application package and an in-person assessment for qualifying applicants.</p> <p>For more information, see How to Apply or contact ied@ryerson.ca.</p>	
How to Apply	+
Awards and Financial Aid	+
Frequently Asked Questions	+
Contact Us	+

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Canadian Social Work Practice

 Certificate

Register now ▶

This innovative, award-winning program is designed to assist internationally educated social work professionals to gain employment in the social service/human service sector in Ontario at levels that match their knowledge and experience. Since the program began in 2005, 89 percent of certificate program graduates have been hired into positions in the social work field within one year of graduation.

Get Connected 



Industry and Careers

This program can lead to career paths in various areas in social work (for those eligible for registration with the Ontario College Of Social workers and Social Service Workers - OCSWSSW) such as:

- Brief and supportive counselling
- Case management
- Child protection
- Children, youth and family support
- Crisis and housing, mental health and addiction
- Violence against women services

Who Should Take This Certificate?

The certificate program is offered to two groups of applicants:

- Experienced social workers whose academic credentials have been recognized as equivalent to a BSW or an MSW by the Canadian Association of Social Workers (CASW), and/or who are registered members of the Ontario College of Social Workers and Social Service Workers (OCSWSSW)

OR

- Those with a degree in the social sciences or humanities who also have significant social service experience

Everyone admitted to the program will be assessed for English proficiency to ensure capacity for success in university-level courses instructed in English. Both streams include placement and job search support.

What Will You Learn?

Offered part-time over a 13-month period (beginning in the Summer term), the program includes courses, mentorship, and work experience. The Internationally Educated Social Work Professionals (IESW) Program provides advanced entry for its nine-month

Required Courses

CSWP 36A is a multi-term course. If you enrol in CSWP 36A for the selected term, you will automatically be enrolled in CSWP 36B for the subsequent term. The automatic enrolment usually occurs near the completion of “A” term, and therefore the “B” term will not appear on your schedule of classes until that time.

[CSWP 301 Decolonizing and Anti-Oppression Practice](#)

[CSWP 402 Social Policy and Social Inclusion](#)

Next Offered: Fall 2022

[CSWP 917 Special Topics I](#)

[CSWP 918 Special Topics II](#)

[CSWP 36A Field Practicum-A](#)

[CVSW 900 Foundations of Social Work](#)

certificate program to underemployed IESWs with proof of advanced academic English language proficiency. The certificate is open only to internationally educated professionals with social service experience approved through the IESW Program admissions process.

Information For IESW Professionals Residing in Ontario	+
Canadian Social Work Practice	+
Tuition and Awards and Financial Aid	+
How to Apply	+
Curriculum and Schedule	+
Frequently Asked Questions	+
Information For IESW Professionals Planning to Immigrate to Ontario	+
Information for Employers	+
Recognition	+
Meet the Team	+
Client Service Charter	+
Contact Us	+

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Caribbean Studies

Certificate

Register now



Enrich your knowledge of the Caribbean through this fascinating interdisciplinary program.

Learn about the Caribbean’s history, politics, and economy. Examine the region’s rich cultural, racial, and ethnic diversity. Explore the importance of the Caribbean community in Canada.

A diverse selection of courses will allow you to engage with contemporary issues in the Caribbean region and its diaspora, including:

- Tourism Impacts and Resistance
- Environmental Sustainability
- Globalization
- Migration
- Multiculturalism
- Transnationalism
- Creolization
- Diaspora
- Racism
- Sexualities
- Equity
- Inclusion

If you want to learn more about contemporary issues in the Caribbean and the region’s influence on the world, this program is for you.

Not ready to enrol but want to learn more?

Fill out this form and a representative from The Chang School will contact you.

Express interest

Required Course

[CCRB 100 Introduction to the Caribbean](#)

Next Offered: Fall 2022

Electives (select 5)

[CCRB 500 Families in the Caribbean](#)

[CCRB 501 Racism and Caribbean Peoples in Canada](#)

Next Offered: Fall 2022

[CCRB 502 Cultural Traditions in the Caribbean](#)

Next Offered: Spring/Summer 2023

[CCRB 600 Postcolonial Caribbean Society](#)

[CCRB 603 Special Topics in Caribbean Studies](#)

[CCRB 605 Caribbean Tourism: Impacts and Resistance](#)

[CCRB 614 Caribbean Critical Thought](#)

[CENG 620 Literatures of the Caribbean](#)

[CFRS 602 French Caribbean Literature and Culture](#)

Next Offered: Fall 2022

[CGEO 705 Environment and Society in the Caribbean](#)

[CHST 222 The History of The Caribbean](#)

Next Offered: Fall 2022

[CSPN 804 Latin American Culture II](#)

[CSPS 502 Spanish Caribbean Literature and Culture](#)

Next Offered: Fall 2022

What Will You Learn?



Who Should Take This Certificate?



Who Teaches the Courses?



Industry and Careers	+
Testimonials	+
Certificate Requirements	—
<div><div><ul style="list-style-type: none">1 required course5 electivesCumulative grade point average (GPA) of 1.67+</div><div><p>To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our Glossary of Terms. If certificate requirements change and courses are no longer available, you may request Course Substitutions/Directives. You must apply to graduate on my.ryerson (RAMSS) within the appropriate application deadlines (refer to Important Dates). Visit Graduation for details.</p></div></div>	
Admission Criteria	—
<div><div><div>Recommended:</div><div><ul style="list-style-type: none">Ontario Secondary School Diploma (OSSD) or equivalent<ul style="list-style-type: none">With 6 Grade 12 U or M credits</div></div><div><div>OR</div><div><ul style="list-style-type: none">Mature student status</div></div><div><p>If you are an undergraduate student, you should be aware of possible certificate restrictions. Check Curriculum Advising ↗ for complete details.</p></div></div>	
Awards and Financial Aid	+
Contact Us	+

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Community Engagement, Leadership, and Development

Certificate

Register now

FULLY ONLINE

Seeking meaningful, transformative work rooted in the community and its well-being? Find it through our Certificate in Community Engagement, Leadership, and Development. From policy and processes to mobilization, you will have the chance to immerse yourself in a practical and comprehensive certificate and apply your learnings in the community.

Engage with topics such as food security, family support, Indigenous communities' world views, social work, fundraising, and conflict resolution. This program is geared toward practitioners from a variety of areas, including social services, education, labour, health, housing, transportation, and more.

Get Connected

Meet Ron: Chang School L...



Industry and Careers

Specially designed in consultation with community practitioners who work in the field, this certificate helps students to develop or enhance their career in a wide variety of areas within the community engagement and services sector.

This certificate can lead to career paths in various roles. Here are some examples:

- Community educator
- Community outreach coordinator
- Housing support worker
- Labour organizer, leader, or union steward
- Manager of a hospital or other health institution
- Occupational therapist
- Physiotherapist
- Program manager for a non-governmental organization (NGO)
- Relief harm reduction worker
- School board community relations consultant
- Social housing manager
- Social worker

Who Should Take This Certificate?

- Undergraduate, and recently graduated students in fields including: social work, child and youth care, early childhood studies, nursing, midwifery, public health, urban and regional planning, political science, education, and healthcare

Required Courses

[CSWP 934 Community Engagement Foundations](#)

Next Offered: Fall 2022

[CSWP 935 Engaging Diverse Communities](#)

Next Offered: Fall 2022

[CSWP 936 Community Engagement Practices](#)

Next Offered: Fall 2022

[CSWP 937 Community Engagement Capstone](#)

Next Offered: Fall 2022

Electives (select 2)

[CFNY 407 Community Development and Food Security](#)

Next Offered: Spring/Summer 2023

[CINP 913 Leadership in Nonprofits](#)

Next Offered: Fall 2022

[CINT 900 Program Planning and Evaluation Strategies](#)

Next Offered: Fall 2022

[CINT 902 Disability Issues](#)

Next Offered: Fall 2022

[CINT 904 Health Promotion and Community Development](#)

Next Offered: Fall 2022

[CINT 905 Conflict Resolution in Community Services](#)

Next Offered: Spring/Summer 2022

[CINT 907 Team Work for Community Services](#)

Next Offered: Fall 2022

[CINT 908 Homelessness in Canadian Society](#)

Next Offered: Fall 2022

[CINT 910 Aboriginal Peoples, Pol. and Reconciliation](#)

Next Offered: Fall 2022

[CINT 911 International Community Development](#)

- Individuals who wish to pursue a career serving and interacting with community services related to development, health, housing, municipal government, and charitable and non-governmental programs
- Experienced community workers seeking to further enhance their education, skill set, and career opportunities

What Will You Learn?

This certificate is comprehensive in its teachings of community engagement and the related challenges, providing learners with a well-rounded understanding of both theory in the classroom and practice in the community. After completing this certificate, you will be able to do the following:

- Enact and support active citizen participation in community and civic affairs
- Engage excluded groups to improve the well-being of neighbourhoods and organizations
- Assess and understand the demographics of an area
- Guide community outreach and engagement initiatives
- Develop and support the implementation of an engagement plan with diverse communities
- Advocate, conduct research, and evaluate community programs

Certificate Requirements

- 4 required course
- 2 electives
- Cumulative grade point average (GPA) of 1.67+

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria

Recommended:

- Ontario Secondary School Diploma (OSSD) or equivalent
 - With 6 Grade 12 U or M credits

OR

- Mature student status with relevant work experience

Awards and Financial Aid

Frequently Asked Questions

Contact Us

Next Offered:Winter 2023

[CINT 914 Settlement Experiences](#)

Next Offered:Fall 2022

[CINT 916 Introduction to Fundraising](#)

Next Offered:Fall 2022

[CINT 920 Community Collaborations](#)

Next Offered:Fall 2022

[CINT 922 Intro to Aboriginal Worldviews](#)

Next Offered:Fall 2022

[CINT 960 Leadership Framework for Community](#)

Next Offered:Fall 2022

[CINT 965 Sex, Drugs and Incarceration](#)

Next Offered:Fall 2022

[CPLE 795 Local Economic Development Fundamentals](#)

Next Offered:Fall 2022

[CSWP 505 Critical Equity and Movements of Resistance](#)

[CSWP 900 Race and Ethnicity](#)

[CSWP 933 Indigenous Health and Well Being](#)

Next Offered:Fall 2022

[CTEC 210 Fundamentals of Project Management](#)

Next Offered:Fall 2022

[CVFS 401 Contemporary Family Issues](#)

Next Offered:Spring/Summer 2023

[CVFS 403 Family Supports Theory and Practice](#)

Next Offered:Winter 2023

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Computer Coding (Formerly Computer Programming Applications)

Certificate

Register now

FULLY ONLINE

The tech sector is an ever-expanding field of opportunity for coders, software developers, including web developers, Whether you're looking to advance your existing tech career and boost your coding skills, or you're interested in pursuing a new career in this dynamic sector, our Certificate in Computer Coding provides the hands-on coding capacities, technical knowledge and skills you need. Learn to code in the most current, in-demand coding languages with employers, and master client/server architecture, dynamic databases, and enterprise network infrastructures.



Get Connected

Industry and Careers

Computer coders with highly developed skills are in demand for digital products and services deployment and production, and this certificate can help graduates find work in a range of companies, firms, and industries:

- Consulting firms
- Energy corporations
- Financial and insurance institutions
- Healthcare industries
- Manufacturers
- Professional and scientific institutions
- Software companies
- Technology companies
- Telecommunications companies

This certificate can lead to career paths in various roles. Here are some examples:

- Coder
- Computer programmer
- Database manager
- Network systems manager
- Software developer
- Software engineer
- Specialist in artificial intelligence (AI)

Who Should Take This Certificate?

- Individuals from a non-STEM background who wish to work as coders and gain

Required Courses

[CCPS 109 Computer Science I](#)

Next Offered:Spring/Summer 2022

[CCPS 209 Computer Science II](#)

Next Offered:Spring/Summer 2022

[CCPS 305 Data Structures](#)

Next Offered:Spring/Summer 2022

[CCPS 393 Introduction to UNIX, C and C++](#)

Next Offered:Spring/Summer 2022

Electives (select 2)

[CCPS 270 Data Access and Management](#)

[CCPS 311 Object Oriented Programming and Design](#)

[CCPS 420 Discrete Structures](#)

Next Offered:Fall 2022

[CCPS 506 Comparative Programming Languages](#)

Next Offered:Spring/Summer 2022

[CCPS 510 Database Systems I](#)

Next Offered:Spring/Summer 2022

[CCPS 590 Operating Systems I](#)

Next Offered:Spring/Summer 2022

[CCPS 610 Database Systems II](#)

Next Offered:Fall 2022

[CCPS 613 Human-Computer Interaction](#)

[CCPS 706 Computer Networks I](#)

[CCPS 721 Artificial Intelligence I](#)

Next Offered:Spring/Summer 2022

[CIND 123 Data Analytics: Basic Methods](#)

Next Offered:Spring/Summer 2022

[CSCI 130 Mobile Robotic Devices Embedded Systems](#)

Next Offered:Fall 2022

[CTEC 210 Fundamentals of Project Management](#)

Next Offered:Fall 2022

experience in hands-on coding, software engineering, database technology, web and mobile development, and related user-support positions

- IT professionals who are interested in upskilling in the most in-demand technical coding skills for career advancement

What Will You Learn?

This certificate will equip you with well-rounded technical skills. After completing this certificate, you will be able to do the following:

- Code for and develop digital products and services
- Perform statistical and data analysis on relational databases
- Execute solutions to problems in enterprise network infrastructures, operating systems, and data communications
- Explore file management techniques involving the fundamentals of database organization, design, and management
- Use computer applications to design outdoor spaces
- Analyze networks, operating systems, and data communications
- Implement AI Frameworks and human-computer interaction systems
- Utilize object-oriented programming languages
- Plan and manage computer programming projects using project management tools

You’ll learn how to code in these tools:

- C
- C++
- UNIX
- Python
- JavaScript
- R
- MATLAB
- SPSS
- GIS Software
- Object-oriented programming (OOP)
- Artificial intelligence frameworks
- MS Project
- 3D Studio Max
- REVIT

Certificate Requirements

- 4 required courses
- 2 electives
- Cumulative grade point average (GPA) of 1.67+

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.


Admission Criteria

Recommended:

- Ontario Secondary School Diploma (OSSD) or equivalent
 - With six Grade 12 U or M credits

OR

- Mature student status with permission of the academic coordinator

If you are an undergraduate student, you should be aware of possible certificate restrictions. Check [Curriculum Advising](#)  for complete details.

Awards and Financial Aid

+

Frequently Asked Questions

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Crime Analytics

Certificate

FULLY ONLINE

Be a part of the growing field of crime analytics, highly in demand by financial institutions, intelligence agencies, and private security. Crime analytics are a part of the new wave of intelligence-led policing being adopted by policing agencies across Canada. Our Certificate in Crime Analytics will equip you with not only a theoretical foundation, but also extensive practical experience with new developments in technology, and it can be completed within a year. In this certificate, you'll gain experience in using crime analysis tools for tactical, strategic, and administrative decision-making in law enforcement.

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Required Courses

[CCRM 100 Introduction to Canadian Criminal Justice](#)

Next Offered: Fall 2022

[CODG 101 Spatial Databases and Digital Cartography](#)

Next Offered: Fall 2022

[CODG 102 Digital Geography and Spatial Analysis](#)

Next Offered: Fall 2022

[CODC 910 Spatial Methods in Crime Analysis](#)

Next Offered: Fall 2022

[CODC 911 Crime Analytics Project](#)

Next Offered: Winter 2023

Electives (select 1)

[CCRM 102 Introduction to Criminology](#)

Next Offered: Spring/Summer 2022

[CCRM 300 Policing in Canada](#)

Next Offered: Fall 2022

[CODG 127 Digital Geography Applications in Community and Social Services](#)

[CODG 210 Spatial Database Management Systems](#)

Next Offered: Fall 2022

[CODG 212 Spatial Statistical Methods](#)

Next Offered: Winter 2023

[CPSY 300 Psychology and Law](#)

Next Offered: Spring/Summer 2022

[CPSY 622 The Psychology of Criminal Behaviour](#)

Industry and Careers

This certificate can lead you to crime analyst positions in national security and law enforcement agencies across local, provincial, and federal lines. The program's extensive practical experience can also help students transition beyond standard policing agencies, as crime analysts are also contracted by private consulting firms and financial institutions. In law enforcement or security agencies, crime analytics are usually carried out by the civilian workforce rather than uniformed or sworn law enforcement personnel.

Who Should Take This Certificate?

- Individuals who have an interest or previous background in criminology, urban planning, geography, sociology, or psychology
- Young professionals who are looking for a more data-driven job but who to strengthen their skills in computer science

What Will You Learn?

After completing this certificate, you will be able to do the following:

- Apply your extensive practical experience in GIS mapping, data analysis, and decision support
- Understand criminal justice, policing, and criminal behaviour
- Understand the role of crime analysts in evidence-based policing, and the uses and misuses of data analysis

Certificate Requirements

- 5 required courses
- 1 elective

- Cumulative grade point average (GPA) 1.6/+

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria



Recommended:

- Ontario Secondary School Diploma (OSSD) or equivalent
 - With 6 Grade 12 U or M credits

OR

- Mature student status

Awards and Financial Aid



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Criminal Justice and Criminology

Certificate

Register now



Join an important and dynamic field. Learn about how the criminal justice system operates and explore the key players and institutions. Examine how people are affected by the justice system and other institutions of regulation.

Prepare for work in criminal justice–related fields or to transition into a related undergraduate program.

This program will help you understand the balancing of the interests of victims, offenders, the public, and politicians, along with concerns about human rights and social justice.

You may be interested if you already work in the public or private sector and are seeking to enter, change, or advance your career in fields related to criminal justice.

Not ready to enrol but want to learn more?

Fill out this form and a representative from The Chang School will contact you.

Express interest

Required Courses

[CCRM 100 Introduction to Canadian Criminal Justice](#)

Next Offered: Fall 2022

[CCRM 102 Introduction to Criminology](#)

Next Offered: Spring/Summer 2022

Electives - Group A (select 3)

[CCRM 200 Criminal Law](#)

Next Offered: Fall 2022

[CCRM 202 Victims and the Criminal Process](#)

[CCRM 300 Policing in Canada](#)

Next Offered: Fall 2022

[CCRM 304 Youth Justice in Canada](#)

[CCRM 306 Corrections in Canada](#)

[CCRM 308 Criminal Courts in Canada](#)

[CCRM 402 Criminal Justice and Social Inequality](#)

Next Offered: Winter 2023

Electives - Group B (select 1)

[CGEO 581 GIS, Geographic Data and Mapping](#)

[CPHL 449 Philosophy of Punishment](#)

[CPHL 612 Philosophy of Law](#)

Next Offered: Fall 2022

[CPSY 300 Psychology and Law](#)

Next Offered: Spring/Summer 2022

[CPSY 602 Developmental Psychopathology](#)

Next Offered: Fall 2022

[CSOC 500 Youth and Society](#)

[CSOC 502 Violence and the Family](#)

Next Offered: Fall 2022

What Will You Learn?

Who Should Take This Certificate?

Who Teaches the Courses?

Industry and Careers

Certificate Requirements

- 2 required courses
- 3 electives from Group A
- 1 elective from Group B
- Cumulative grade point average (GPA) 1.67+

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and

refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria

Recommended:

- Ontario Secondary School Diploma (OSSD) or equivalent
 - With 6 Grade 12 U or M credits

OR

- Mature student status with relevant work experience including policing, corrections, courts, social service agencies, security management services, or regulatory enforcement agencies

If you are an undergraduate student, you should be aware of possible certificate restrictions. Check [Curriculum Advising](#) [↗](#) for complete details.

Awards and Financial Aid

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Cybersecurity, Data Protection and Digital Forensics

Certificate

Register now

FULLY ONLINE

Equip yourself with a diverse set of technical cyber security skills and be hired into the cybersecurity field through our Certificate in Cybersecurity, Data Protection, and Digital Forensics. Gain first-hand experience with key industry tools and technical skills necessary to work in the field through virtual labs and real-work projects. The practical experience you can gain through this certificate will include collecting digital evidence after a cybersecurity break, legal hacking, and detecting and closing any security gaps.

Get Connected



This certificate will qualify you to take the Certified Information Systems Security Professional (CISSP) exam and other similar examinations. Graduate with the right tools and a recognized certification are able to attain cybersecurity positions across the private and public sectors right away.

Industry and Careers

Analysts with highly developed skills provide protection and security while upholding international laws in cybersecurity. Completion of this certificate can lead to roles within the following industries:

- Consulting firms
- Financial institutions such as banks
- Government entities
- IT companies
- Law enforcement
- Major corporations

Who Should Take This Certificate?

- Individuals who seek to enrich their existing knowledge and learn the essential technical and real-work capabilities intrinsic to computer security assurance and cybersecurity forensics
- Employees in public and private corporations and government entities who wish to improve or develop skills sets in cybersecurity
- Individuals who aspire to join a field with long-term career prospects

What Will You Learn?

Required Courses

You may only select 1 of CKDF 145, CSCI 243, or CZLW 120.

[CKDF 110 Computer Network Security](#)

Next Offered: Fall 2022

[CKDF 120 Computer Cryptography and Digital Steganography](#)

Next Offered: Fall 2022

[CKDF 130 Digital Forensics Systems](#)

Next Offered: Fall 2022

[CKDF 140 Security Architecture and Design](#)

Next Offered: Fall 2022

[CKDF 145 Certified Information Systems Security Professional \(CISSP\)](#)

Next Offered: Fall 2022

[CKDF 150 Digital Forensics Investigation](#)

Next Offered: Fall 2022

[CSCI 243 Continuity and Risk Management](#)

Next Offered: Fall 2022

[CZLW 120 Law for Forensics Professionals](#)

Next Offered: Spring/Summer 2023

This program teaches a set of technical cybersecurity skills that can be applied to systems security, protection, and privacy as a cybersecurity specialist at your workplace. After completing this certificate, you will be able to do the following:

- Extract evidence using investigative protocols and report on a variety of complex issues that may arise in enterprise information systems. Here are some examples:
 - Network and computer hacking
 - Cyber extortion
 - Organized cyber crime
 - Cyber espionage detection
- Understand privacy and security protocols in compliance with complex legal and regulatory parameters
- Apply best-in-kind cybersecurity technical practices to real world problems. Here are some examples:
 - White/black box penetration testing
 - System and network vulnerability identification
 - Security weakness remediation
- Manage and evaluate information security and data protection functions integrated within the greater organizational governance structure

Tools in use include the following:

- Penetration testing
 - Kali Linux, Metasploit
- Network assessment and protection
 - Wireshark, Nmap, Ncrack, Nessus, hping3
- WebGoat
- Online virus scanners
- Intrusion detection
 - iptables
 - Snort
- Encryption and decryption methods
 - Certificate authority/digital signatures and digital watermarking
 - Hash functions
 - CrypTool, S-Tools
- Forensics analysis
 - Autopsy
 - Honeypots
 - FTK Imager
 - Mobile: iPhone Analyzer

Certificate Requirements

- 6 required courses
- Cumulative grade point average (GPA) of 1.67+

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria

Recommended:

- Ontario Secondary School Diploma (OSSD) or equivalent
 - With 6 Grade 12 U or M credits (including English)
 - With a minimum average of 70 percent

OR

- Mature student status

Note: Knowledge of TCP/IP is recommended.

Awards and Financial Aid

+

Frequently Asked Questions

+

Contact Us

+

Data Analytics, Big Data, and Predictive Analytics

Certificate

[Register now](#) ➤

FULLY ONLINE

Data literacy is critical for a number of industries, and data science is another emerging field in high demand in the job market. From product research and development to infrastructure and finance, the need for a foundation in analytics is growing. Rise to meet the challenges posed by data science, and set yourself up for career advancement with our Certificate in Data Analytics, Big Data, and Predictive Analytics.

[Get Connected](#) 

Meet Lanzo: Chang Schoo...



With hands-on learning, this certificate will provide you with a strong foundation in analytics, tools, and statistics. It will guide you in using data analytics, big data, and predictive analytics to optimize performance in fields like data warehousing, data management, IT, and more. Upon completing the certificate, you will be prepared to take the INFORMS Certified Analytics Professional (CAP®) exam to become a certified professional in this new and growing field.

Industry and Careers

The skills taught in this certificate are applicable across nearly all sectors. Whether you wish to enrich your skill set in the following roles, or you are interested in pursuing a new career, this certificate offers opportunities for a variety of career paths:

- Applied statistician
- Business analyst
- Data analyst
- Data scientist
- Financial analyst

Who Should Take This Certificate?

- Individuals who wish to enhance their existing knowledge of data and analytics and learn the fundamental components of the world of big data
- Employees in both public and private corporations and government entities, who are looking to advance in a job with long-term career prospects

What Will You Learn?

You will gain relevant, timely, and effective education in data analytics foundations, basic and advanced analytics methods, and big data analytics tools. After completing this certificate, you will be able to do the following:

- Demonstrate fundamental concepts and techniques of big data and its industrial applications

Required Courses

You may only select 1 of CIND 110 or CCPS 270.

[CCPS 270 Data Access and Management](#)

[CIND 110 Data Organization for Data Analysts](#)

Next Offered: Spring/Summer 2022

[CIND 119 Introduction to Big Data](#)

Next Offered: Spring/Summer 2022

[CIND 123 Data Analytics: Basic Methods](#)

Next Offered: Spring/Summer 2022

[CIND 820 Big Data Analytics Project](#)

[CIND 830 Python Programming for Data Science](#)

Next Offered: Spring/Summer 2022

[CMTH 642 Data Analytics: Advanced Methods](#)

Next Offered: Spring/Summer 2022

- Develop analytical and numerical expressions using real problems
- Apply engineering mathematics and computations to solve mathematical models
- Know where to take your career next and how to further enrich your knowledge and experience

Tools in use include the following:

- R
- SAS
- Python
- Tableau
- XPath and XQuery
- Structured Query Language (SQL)
- Hadoop (MapReduce)

Data Collection and Storage Tools

- MySQL
- MongoDB

Analytics Tools

- Python Libraries for Data Analysis
- R Packages for Data Analysis

Integrated Development Environment (IDE)

- MySQL Workbench
- RStudio
- MS-VSCode
- Robo3T

Certificate Requirements

—

- 6 required courses
- Cumulative grade point average (GPA) of 1.67+

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria

—

Recommended:

- Ontario Secondary School Diploma (OSSD) or equivalent
 - With 6 Grade 12 U credits (including English, Mathematics (Advanced Functions and one of either Calculus and Vectors or Data Management), and Science (Biology or Chemistry or Physics)) OR M credits with a minimum average of 70 percent or equivalent academic status

OR

- Mature student status with 4 years of relevant professional experience
 - And permission of the academic coordinator

Frequently Asked Questions

+

Professional Designations and Accreditation

+

Awards and Financial Aid



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Design for Arts and Entertainment

 Certificate

Register now



Prepare for a career in scenography and learn to design for motion pictures, live entertainment, and cultural events.

This certificate program will help you develop the skills needed to make set, prop, and costume design proposals.

Upon successful completion, we will direct you to paid apprenticeships in Toronto’s vibrant entertainment sector through a policy of ongoing mentorship, including any additional professional development you may need.

Want to find out more about the **Certificate in Design for Arts and Entertainment**? Express interest to connect with this program and receive updates.

Express interest

This program offers the following benefits:

- Enrol right away – open admissions with no application required
- Take Ryerson degree-credit courses
- Prepare for recognition by leading professional associations (*additional training required*)
- Apply for merit-based awards

What Will You Learn?



Who Should Take This Certificate?



Who Teaches the Courses?



Industry and Careers



Certificate Requirements



- 5 required courses
- 2 electives

Required Courses

[CDID 150 Design Theory](#)

Next Offered: Fall 2022

[CDID 170 Drafting for Entertainment](#)

[CDMP 130 History of Arts and Scenography](#)

Next Offered: Winter 2023

[CFPN 501 Scenography I: Art Direction](#)

Next Offered: Fall 2022

[CFPN 601 Scenography II - Production Design](#)

Next Offered: Winter 2023

Electives (select 2)

[CCMN 314 Professional Presentations](#)

Next Offered: Fall 2022

[CDFA 104 Fashion Drawing I](#)

[CDFC 106 Fashion, Culture, and Society](#)

[CDFP 391 History of Photography I](#)

Next Offered: Fall 2022

[CDID 552 Entertainment Lighting Design](#)

[CDMP 120 Film History](#)

[CENG 101 Laughter and Tears: Comedy and Tragedy](#)

Next Offered: Fall 2022

[CFPN 323 Sound Design for Digital Media I](#)

Next Offered: Winter 2023

[CFPN 531 Cinematography and Lighting Design I](#)

[CMPC 203 Art in the Modern World](#)

Next Offered: Winter 2023

[CRTA 180 Music and Film](#)

Next Offered: Spring/Summer 2022

- Cumulative grade point average (GPA) of 1.67+

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Recommended Course Sequence



Why Register for the Certificate?



Admission Criteria



Recommended:

- Ontario Secondary School Diploma (OSSD) or equivalent
 - With 6 Grade 12 U or M credits (including English)
 - With a minimum average of 60 percent

OR

- Mature student status with relevant professional experience

Note: If you have no previous drawing experience, you must successfully complete [CDID 803 - Drawing Fundamentals](#).

Awards and Financial Aid



Frequently Asked Questions



Testimonials



Course Delivery Schedule



Contact Us



[Ryerson University has changed its name. Find out more.](#)

Design Management

Certificate

Register now



Important note: The Certificate in Design Management will be discontinued in Fall 2022. Your final opportunity to register for this certificate program will be the Spring/Summer 2022 term; classes begin the week of May 2.

Interested in this certificate? Contact our Client Services Advisors at ce@ryerson.ca for more information.

In today's dynamic economy, the skills of designers are particularly valuable. Design management has become recognized all over the world as a core competency for companies in a variety of industry sectors.

This multi-disciplinary certificate program explores how to manage design effectively to achieve economic, social, and environmental advantage in the modern business environment. It will also teach you to manage the creative skills of designers to achieve specific strategic goals. Management in design firms is also addressed.

This program offers the following benefits:

- Enrol right away – open admissions with no application required
- Take a mix of online and in-class courses
- Take Ryerson degree-credit courses
- Get real industry experience through internship, practicum, or project-based opportunities
- Finish your certificate faster through our intensive schedule option
- Apply for merit-based awards

Want to find out more about the **Certificate in Design Management?** Express interest to connect with this program and receive updates.

Express interest

Required Courses

[CDDM 101 Introduction to Design Management](#)

Next Offered: Fall 2022

[CDDM 102 Design Management II](#)

Next Offered: Winter 2023

[CDDM 103 Design Management Project](#)

Next Offered: Spring/Summer 2023

Electives (select 5)

[CCMN 314 Professional Presentations](#)

Next Offered: Fall 2022

[CDDM 104 Design Awareness I](#)

[CDDM 106 Design Research](#)

[CDID 150 Design Theory](#)

Next Offered: Fall 2022

[CENT 500 New Venture Startup](#)

Next Offered: Fall 2022

[CGCM 110 Introduction to Graphic Communications](#)

Next Offered: Spring/Summer 2023

[CITM 100 Foundations of Information Systems](#)

Next Offered: Fall 2022

[CMHR 405 Organizational Behaviour](#)

[CMKT 100 Principles of Marketing](#)

Next Offered: Fall 2022

[CTEC 210 Fundamentals of Project Management](#)

Next Offered: Fall 2022

What Will You Learn?



Who Should Take This Certificate?



Who Teaches the Courses?



Industry and Careers	+
Certificate Requirements	—
<div><div><div><div></div></div><div>3 required courses</div></div><div><div><div></div></div><div>5 electives</div></div><div><div><div></div></div><div>Cumulative grade point average (GPA) of 1.67+</div></div></div> <p>To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our Glossary of Terms. If certificate requirements change and courses are no longer available, you may request Course Substitutions/Directives. You must apply to graduate on my.ryerson (RAMSS) within the appropriate application deadlines (refer to Important Dates). Visit Graduation for details.</p>	
Recommended Course Sequence	+
Admission Criteria	—
<div><div><div><div></div></div><div>Recommended:</div></div><div><div><div></div></div><div>Ontario Secondary School Diploma (OSSD) or equivalent</div><div><div></div><div>With 6 Grade 12 U or M credits</div></div></div><div><div><div></div></div><div>OR</div></div><div><div><div></div></div><div>Mature student status</div></div><div><div><div></div></div><div>Note: Work experience and/or post-secondary education related to design or business is desirable.</div></div></div>	
Awards and Financial Aid	+
Contact Us	+

[Ryerson University has changed its name. Find out more.](#)



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Digital Art Production

Certificate

FULLY ONLINE

Develop your creative and technical skills in digital content production. Learn design, visual communication, interaction design, and storytelling skills. Enrich your understanding of art, media, and culture.

This six-course, fully-online program is offered in cooperation with [Ryerson University's School of Image Arts](#). It is the only part-time program in Canada that offers a combination of applied creative and digital courses at the university degree-credit level.

Get Connected



Industry and Careers

This certificate could lead career paths in:

- Animation
- Computer-generated effects
- Digital art
- Digital games
- Graphic design
- Interaction and interface design
- Mobile app development
- Web design

Who Should Take This Certificate?

- Individuals looking to gain a solid foundation for further study at the undergraduate or graduate level
- Working professionals looking to make a career change to a rapidly growing creative field
- Visual artists looking to enhance their work in film, photography, fine art, graphic design, or journalism to expand their audience

This certificate program offers students the opportunity to apply some or all of the credit earned through the certificate as transfer credits to a BFA in Image Arts at Ryerson or at other universities (subject to admission and the requirements of the degree to which you are applying).

What Will You Learn?

After completing this certificate, you will be able to:

Create original content and integrate it into the digital world

Gain theoretical, historical, and contemporary knowledge of art, design, and global communication

Register now

Required Courses

[CMPC 101 Visual Studies I](#)

Next Offered: Fall 2022

[CMPC 103 Art and the Classical Tradition](#)

Next Offered: Fall 2022

Electives (select 4)

[CDMP 125 Fiction Screenwriting](#)

Next Offered: Fall 2022

[CEID 100 Digital Skills: Int'l Innovation](#)

Next Offered: Spring/Summer 2023

[CFPN 534 Graphic Design](#)

Next Offered: Fall 2022

[CFPN 535 User Experience Design](#)

Next Offered: Fall 2022

[CFPN 537 Immersive Imaging](#)

[CFPN 539 The Human Figure](#)

[CFPN 541 Digital Animation Concepts](#)

Next Offered: Fall 2022

[CFPN 542 Design for Mobile Devices](#)

[CFPN 547 Co-Operative Internship](#)

[CMPC 203 Art in the Modern World](#)

Next Offered: Winter 2023

[CNPF 566 History of Animation](#)

Next Offered: Winter 2023

Continuing Education

You can also customize your learning through your choice of electives that focus on skills including fiction screenwriting, digital skills and innovation, graphic design, interaction design, design for mobile devices, and more.

You can also choose to take a [Co-Operative Internship course](#) to gain professional experience in production situations and settings.

Certificate Requirements	—
<div><ul style="list-style-type: none">2 required courses4 electivesCumulative grade point average (GPA) of 1.67+<p>To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our Glossary of Terms. If certificate requirements change and courses are no longer available, you may request Course Substitutions/Directives. You must apply to graduate on my.ryerson (RAMSS) within the appropriate application deadlines (refer to Important Dates). Visit Graduation for details.</p></div>	
Admission Criteria	—
<div><p>Recommended:</p><ul style="list-style-type: none">Ontario Secondary School Diploma (OSSD) or equivalent<ul style="list-style-type: none">With 6 Grade 12 U or M creditsWith a minimum average of 60 percent<p>OR</p><ul style="list-style-type: none">Mature student status<p>If you are an undergraduate student, you should be aware of possible certificate restrictions. Check Curriculum Advising ↗ for complete details.</p></div>	
Awards and Financial Aid	+
Frequently Asked Questions	+
Contact Us	+

Economics and Finance

Certificate

[Register now](#) ➔

FULLY ONLINE

Designed for students who aspire to careers in banking and finance, this certificate can help you join an exciting industry or accelerate your current work in these fields. Our Certificate in Economics and Finance will help prepare you to qualify as a Chartered Financial Analyst (CFA) or Certified Financial Planner (CFP), or to pursue graduate studies in economics, finance, or business administration.

[Get Connected](#) 



Industry and Careers

Careers in economics and finance require many of the same skills, including the ability to analyze information, compile statistics, and make informed decisions. Professionals with these skills are particularly valuable to banks and other financial institutions.

This certificate can help you meet the educational criteria for several in-demand professional designations, including Chartered Financial Analyst (CFA) and Certified Financial Planner (CFP). It can also help you prepare to take the Canadian Securities Examination or pursue graduate studies in economics, finance, or business administration.

Who Should Take This Certificate?

- Individuals aspiring to a career in banking and finance, or if you're already working in these fields and want to accelerate your career
- Career professionals who want to prepare to qualify as a Chartered Financial Analyst (CFA) or Certified Financial Planner (CFP)
- Students who want to pursue graduate studies in economics, finance, or business administration

What Will You Learn?

Develop strong analytical skills through a wide range of introductory economics courses and specialized finance courses. Build a foundation in microeconomics, macroeconomics, and monetary economics.

Learn the major concepts in finance and investments, including the time value of money, discounted cash flows, and risk and return.

This certificate will also provide you with a thorough introduction to the mathematics of asset valuation and an overview of security analysis and portfolio management, including:

- equilibrium pricing relationships
- efficient market hypothesis

Required Courses

[CECN 104 Introductory](#)

[Microeconomics](#)

Next Offered: Fall 2022

[CECN 204 Introductory](#)

[Macroeconomics](#)

Next Offered: Fall 2022

[CFIN 300 Managerial Finance I](#)

Next Offered: Fall 2022

[CFIN 401 Managerial Finance II](#)

Next Offered: Fall 2022

Electives (select 2)

You may only select 1 of CECN 721 or CFIN 621.

[CECN 129 Statistics for](#)

[Economics I](#)

[CECN 301 Intermediate](#)

[Macroeconomics I](#)

Next Offered: Fall 2022

[CECN 504 Intermediate](#)

[Microeconomics I](#)

Next Offered: Fall 2022

[CECN 506 Money and Banking](#)

Next Offered: Fall 2022

[CECN 606 International Monetary](#)

[Economics](#)

Next Offered: Fall 2022

[CECN 703 Public Sector](#)

[Economics](#)

[CECN 721 International Financial](#)

[Markets](#)

[CFIN 501 Investment Analysis](#)

Next Offered: Fall 2022

[CFIN 502 Personal Financial](#)

[Planning](#)

Next Offered: Fall 2022

[CFIN 510 Small Business Finance](#)

[CFIN 512 Risk Management and](#)

[Insurance](#)

Next Offered: Winter 2023

[CFIN 601 Derivatives](#)

[CFIN 612 Retirement and Estate](#)

- efficient market hypothesis

- evaluation of portfolio performance
- modern portfolio theory
- treasury bills and bonds
- valuation of common stock
- risk and return

[Planning](#)

Next Offered: Spring/Summer 2023

[CFIN 621 International Finance](#)

Next Offered: Spring/Summer 2023

Certificate Requirements

- 4 required courses
- 2 electives
- Cumulative grade point average (GPA) of 1.67+

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.rverson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria

Recommended:

- Ontario Secondary School Diploma (OSSD) or equivalent
 - With 6 Grade 12 U credits (including English, Mathematics (one of which must be Advanced Functions, Calculus and Vectors, or Data Management)
 - Or with M credits with a minimum average of 70 percent or equivalent academic status

OR

- Mature student status

AND

[CACC 110](#) or equivalent

If you are an undergraduate student, you should be aware of possible certificate restrictions. Check [Curriculum Advising](#) [↗](#) for complete details.

Professional Designations and Accreditation

Awards and Financial Aid

Contact Us

Economics: Fundamentals

Certificate

[Register now](#) ➔

FULLY ONLINE


Build a solid foundation in the principles of Economics and general Economic Theory. This certificate is designed for students with no previous training in Economics and will introduce you to key concepts and theories.

Knowledge of Economics can be useful for careers in a wide variety of fields or can serve as the first step towards more advanced academic studies.

By completing this certificate, you will be able to demonstrate knowledge of basic microeconomic and macroeconomic theory, and their application to various subfields of Economics, including Environmental Economics, Monetary Economics, and International Economics.

Once you complete this certificate, you may also be interested in taking our more advanced [Certificate in Economics: Theory and Applications](#).

This certificate can be completed entirely online.

 **Not ready to enrol but want to learn more?**

Fill out this form and a representative from The Chang School will contact you.

[Express interest](#) 

Required Courses

[CECN 104 Introductory](#)

[Microeconomics](#)

Next Offered: Fall 2022

[CECN 204 Introductory](#)

[Macroeconomics](#)

Next Offered: Fall 2022

Electives (select 2)

If you plan to pursue the Certificate in Economics: Theory and Applications, you should select CECN 189, as it is a prerequisite for the program.

[CECN 189 Mathematics for Economics I](#)

Next Offered: Fall 2022

[CECN 220 Evolution of the Global Economy](#)

[CECN 301 Intermediate Macroeconomics I](#)

Next Offered: Fall 2022

[CECN 321 Introduction to Law and Economics](#)

Next Offered: Fall 2022

[CECN 340 The Economics of Human Behaviour](#)

Next Offered: Spring/Summer 2023

[CECN 502 Economics of Energy and Natural Resources](#)

[CECN 504 Intermediate Microeconomics I](#)

Next Offered: Fall 2022

[CECN 506 Money and Banking](#)

Next Offered: Fall 2022

[CECN 511 Economy and Environment](#)

Next Offered: Spring/Summer 2023

[CECN 512 The Economics of Sex](#)

[CECN 603 Economic Issues in Globalization](#)

Next Offered: Spring/Summer 2023

[CECN 640 Economics of Immigration](#)

What Will You Learn?

+

Who Should Take This Certificate?

+

Who Teaches the Courses?

+

Industry and Careers

+

Testimonials

+

Certificate Requirements

—

- 2 required courses
- 2 electives*
- Cumulative grade point average (GPA) of 1.67+

*If you plan to pursue the [Certificate in Economics: Theory and Applications](#), you should select CECN 189, as it is a prerequisite for the program.

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria

—

[CECN 722 Economic Issues in Professional Sports](#)

Next Offered: Winter 2023

Recommended:

- Ontario Secondary School Diploma (OSSD) or equivalent
 - With 6 Grade 12 U credits (including English or Mathematics)
 - Or With M credits

OR

- Mature student status

If you are an undergraduate student, you should be aware of possible certificate restrictions. Check [Curriculum Advising](#) [↗](#) for complete details.

Awards and Financial Aid

+

Contact Us

+

Economics: Theory and Applications

Certificate

[Register now](#) ➔

Learn how to apply mathematical and statistical tools to the analysis of a wide variety of economic and business problems. Build on your existing knowledge to gain an advanced understanding of Economics.

Not ready to enrol but want to learn more?

Fill out this form and a representative from The Chang School will contact you.

If you've already completed the [Certificate in Economics: Fundamentals](#), this certificate can help you develop a deeper understanding of economic theory and quantitative methods.

[Express interest](#) 

With economic forces at play everywhere in both the private and public sectors, this certificate can help you gain a competitive edge in a wide range of career paths. It may also serve as a stepping stone if you have a degree in another field but wish to pursue graduate studies in Economics or a related field.

What Will You Learn?

+

Who Should Take This Certificate?

+

Who Teaches the Courses?

+

Industry and Careers

+

Certificate Requirements

—

- 1 required course
- 3 electives*
- Cumulative grade point average (GPA) of 1.67+

*You must take 3 selections from the Electives (that you haven't already taken as Required Courses).

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Suggested Elective Groupings

—

Students may choose electives from a variety of areas in economics, or they may choose to focus on a specific area to achieve their individual goals. The electives may be grouped as follows:

Required Courses (select 1) —

[CECN 301 Intermediate](#)

[Macroeconomics I](#)

Next Offered: Fall 2022

[CECN 504 Intermediate](#)

[Microeconomics I](#)

Next Offered: Fall 2022

Electives (select 3 not previously taken in Required Courses) —

[CECN 230 Mathematics for Economics II](#)

Next Offered: Spring/Summer 2023

[CECN 301 Intermediate](#)

[Macroeconomics I](#)

Next Offered: Fall 2022

[CECN 501 Industrial Organization](#)

[CECN 504 Intermediate](#)

[Microeconomics I](#)

Next Offered: Fall 2022

[CECN 510 Environmental Economics](#)

[CECN 600 Intermediate](#)

[Macroeconomics II](#)

Next Offered: Fall 2022

[CECN 601 Economics of Information](#)

[CECN 605 Labour Economics](#)

[CECN 606 International Monetary Economics](#)

Next Offered: Fall 2022

[CECN 614 An Introduction to Game Theory](#)

[CECN 627 Econometrics I](#)

Next Offered: Spring/Summer 2023

[CECN 700 Intermediate](#)

[Microeconomics II](#)

Next Offered: Fall 2022

[CECN 702 Econometrics II](#)

[CECN 703 Public Sector Economics](#)

[CECN 707 Economics of International Trade I](#)

Core Economics: [CECN 301](#), [CECN 504](#), [CECN 600](#), [CECN 700](#)
International Economics: [CECN 301](#), [CECN 504](#), [CECN 606](#), [CECN 700](#), [CECN 707](#)
Macroeconomics: [CECN 301](#), [CECN 600](#), [CECN 606](#), [CECN 808](#), [CECN 815](#)
Microeconomics: [CECN 501](#), [CECN 504](#), [CECN 601](#), [CECN 614](#), [CECN 700](#), [CECN 715](#)
Applied Economics: [CECN 301](#), [CECN 605](#), [CECN 627](#), [CECN 702](#)
Economic Policy: [CECN 301](#), [CECN 510](#), [CECN 703](#), [CECN 803](#)

[International Trade I](#)

Next Offered: Spring/Summer 2023

[CECN 715 Advanced Microeconomics](#)

[CECN 803 Canadian Tax Policy](#)

[CECN 808 Economic Growth and Technological Change](#)

[CECN 815 Advanced Macroeconomics](#)

Admission Criteria

—

Recommended:

- Ontario Secondary School Diploma (OSSD) or equivalent
 - With 6 Grade 12 U credits (including English or Mathematics)
 - Or With M credits

OR

- Mature student status

AND

- The following course or equivalent:
 - [CECN 189 - Mathematics for Economics I](#)

If you are an undergraduate student, you should be aware of possible certificate restrictions. Check [Curriculum Advising](#) [↗](#) for complete details.

Awards and Financial Aid

+

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Emergency Management, Threat and Response Planning

Certificate

Register now

FULLY ONLINE

Emergency response planning is now part of our “new normal” – every organization needs to prepare for and respond to a range of scenarios that can affect their operations in difficult times. Our fully online four-course certificate will give you a practical and timely foundation in key emergency management, threat planning, risk and continuity management, and response planning concepts that can minimize the impact of emergencies. Be part of the new generation of professionals equipped with the flexible, in-demand skills needed for Canadian and global emergency management.



Get Connected

Required Courses

[CSCI 230 Emergency Management Practice](#)

Next Offered: Fall 2022

[CSCI 232 Incident and Operations Management](#)

Next Offered: Fall 2022

[CSCI 234 Analysis of Critical Incidents](#)

Next Offered: Fall 2022

[CSCI 243 Continuity and Risk Management](#)

Next Offered: Fall 2022

Industry and Careers

Analysts with highly developed skills in disaster and emergency management are required in the following areas:

- Businesses and other for-profit enterprises
- Community development organizations
- Disaster mitigation and recovery operations
- Emergency services
- Humanitarian agencies
- NGOs
- Public sector

This certificate can lead to a career in roles such as the following:

- Disaster response architect
- Disaster recovery program manager
- Emergency preparedness and services advisor
- Emergency response planner
- Emergency response technical solution architect
- Risk and continuity management specialist
- Urban and municipal planner
- Urban resilience planner

Who Should Take This Certificate?

- Recent university graduates from business management programs who would like to enhance their data analysis skill set to be more competitive in the job market
- Technically trained individuals who are looking to gain knowledge and skills to pivot

into a career in disaster and emergency management

What Will You Learn?

After completing this certificate, you will be able to do the following:

- Lead, interact, and work within the context of emergency management settings and within the law during disasters and emergencies
- Assess threats and realities and in response, author and implement plans for incident management mitigation, recovery and business continuity for first and second responders, emergency managers, and their organizations
- Engage in practical emergency management scenarios, including incident management command centres and operations
- Operationalize emergency management organizational mechanisms in every stage of emergency responsiveness
- Use international methodologies for measuring, describing, and assessing emergency management activities, concepts, policies, missions, operations, and goals

[Check out what these graduates are doing after completing their certificate.](#)

Effective Fall 2021, the Certificate in Emergency Management and Response Planning has been revised. Students who were formally registered in the certificate prior to July 2, 2021, must complete the curriculum requirements that were in effect at the time of their registration. For curriculum details, refer to the [archived calendar](#) for your year of registration. Please contact our Client Services team at ce@ryerson.ca if you have any questions.

Certificate Requirements

- 4 required courses
- Cumulative grade point average (GPA) of 1.67+

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria

Recommended:

- Ontario Secondary School Diploma (OSSD) or equivalent
 - With 6 Grade 12 U or M credits

OR

- Mature student status

Awards and Financial Aid

Frequently Asked Questions

Contact Us

Energy Management and Conservation

Certificate

[Register now](#) ➤

Important Note: The Certificate in Energy Management and Conservation will not be accepting any new registrants. This certificate has been discontinued effective Winter 2022. Students formally registered in the certificate prior to November 2, 2021 must complete the program requirements in effect at the time they registered.

For curriculum details, please refer to the archived calendar for your year of registration. For more information, please contact ce@ryerson.ca.

Required Courses

[CTEC 241 Energy Innovation](#)

[CTEC 264 Trends in Smart Grid](#)

[CTEC 269 Trends in Energy
Conservation](#)

[CTEC 282 Public Policy in Energy](#)

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English Literature and Popular Culture

Certificate

Register now



Build a foundation in diverse literary forms, from Shakespeare to popular culture. Hone critical analysis skills and the ability to write organized, sustained, and well-reasoned arguments. Develop your own creative writing style.

This certificate allows you to tailor your studies to your own literary interests and aspirations.

Note: Effective Fall 2020, the Certificate in English Literature and Popular Culture has been revised. Students who were formally registered in the certificate prior to July 2, 2020, must complete the curriculum requirements that were in effect at the time of their registration. For curriculum details, please refer to the [archived calendar](#) for your year of registration.

Not ready to enrol but want to learn more?

Fill out this form and a representative from The Chang School will contact you.

Express interest

Required Courses

[CENG 110 Literatures Across Borders](#)

Next Offered: Fall 2022

Electives (select 5)

[CENG 112 Zap, Pow, Bang: Pop Lit](#)

Next Offered: Fall 2022

[CENG 200 Writing as a Cultural Act](#)

[CENG 208 Introduction to Non-Fiction](#)

[CENG 222 Fairy Tales and Fantasies](#)

Next Offered: Fall 2022

[CENG 230 Creativity, Writing, and Everyday Life](#)

Next Offered: Spring/Summer 2022

[CENG 503 Science Fiction](#)

Next Offered: Fall 2022

[CENG 505 Creative Writing](#)

Next Offered: Spring/Summer 2022

[CENG 510 Gothic Horror](#)

Next Offered: Spring/Summer 2022

[CENG 511 The Art of Writing Life](#)

Next Offered: Fall 2022

[CENG 610 The Language of Love, Sex and Gender](#)

[CENG 706 Shakespeare and Performance](#)

Next Offered: Spring/Summer 2023

What Will You Learn?



Who Should Take This Certificate?



Who Teaches the Courses?



Industry and Careers



Certificate Requirements



- 1 required course
- 5 electives
- Cumulative grade point average (GPA) of 1.67+

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Recommended Course Sequence



Admission Criteria



Recommended:

- Ontario Secondary School Diploma (OSSD) or equivalent
 - With 6 Grade 12 U or M credits (including English)
 - With a minimum average of 70 percent

OR

- Mature student status

If you are an undergraduate student, you should be aware of possible certificate restrictions. Check [Curriculum Advising](#) [↗](#) for complete details.

Awards and Financial Aid



Contact Us



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Entering Foreign Markets

Certificate

Register now

FULLY ONLINE

Venturing into foreign markets is an attractive option for businesses to reach new consumers, generate additional streams of revenue, lower production costs, and diversify business risk. Yet, it can be a complicated journey. Political, economic, and cultural factors can add unexpected complexity and unpredictability that negatively impacts expansion efforts. Companies need people with the knowledge and skills to assess international markets, understand the complexities, navigate the unpredictability, and determine appropriate strategies for entry. Our Certificate in Entering Foreign Markets can help you gain the knowledge and skills to effectively communicate marketing ideas and business concepts in a cross-cultural environment.



Get Connected

Industry and Careers

This certificate can lead to career paths in roles such as:

- global markets research and analysis
- international marketing and communications
- international business development

Who Should Take This Certificate?

- Graduates of non-business related fields who want to gain some foundational knowledge in international business
- Professionals who want specialized skills in evaluating foreign markets for entry
- Advertising and communications professionals who need skills in effective marketing across borders
- New graduates who want to complement their degree with a certificate related to international business

What Will You Learn?

After completing this certificate, you will able to:

- effectively communicate marketing ideas and business concepts in a cross-cultural environment
- define and understand the basic functions of management
- demonstrate an understanding of the theory and application of the “four ps of marketing” model
- leverage primary and secondary research of marketing metrics to inform decision-making

Required Courses

[CGMS 200 Introduction to Global Management](#)

Next Offered: Fall 2022

[CGMS 522 International Marketing](#)

Next Offered: Fall 2022

[CMKT 100 Principles of Marketing](#)

Next Offered: Fall 2022

Electives (select 1)

[CGMS 690 The North American Business Environment](#)

Next Offered: Fall 2022

[CGMS 691 The Asian Business Environment](#)

Next Offered: Winter 2023

[CGMS 692 The European Business Environment](#)

Next Offered: Spring/Summer 2023

[CGMS 695 The Middle Eastern Business Environment](#)

Marketing

- formulate and implement effective cross-border marketing strategies that resonate with diverse audiences
- identify and analyze diverse types of risks for business, including political risk
- demonstrate specialized knowledge of the business environment in a specific global region of interest to you

Certificate Requirements



- 3 required courses
- 1 elective
- Cumulative grade point average (GPA) of 1.67+

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria



Recommended:

- Ontario Secondary School Diploma (OSSD) or equivalent
 - With six Grade 12 U or M credits

OR

- Mature student status

If you are an undergraduate student, you should be aware of possible certificate restrictions. Check [Curriculum Advising](#) [↗](#) for complete details.

Awards and Financial Aid



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Entrepreneurship and Small Business

Certificate

[Register now](#) ➤

Do you have a business idea that you want to get off the ground? Do you already own a small business and need help taking it to the next level? This certificate gives you the entrepreneurial skills to succeed in an increasingly competitive marketplace. The more you know about identifying opportunities, developing a business plan, and scaling your idea, the more successful your business can become – and the Certificate in Entrepreneurship and Small Business can help you get there.



[Get Connected](#) ➤

Industry and Careers

Entrepreneurial opportunities are available in every sector of the economy to people with any type of educational and professional background. From athletes to architects, graphic designers to engineers, healthcare to IT professionals – our certificate helps you transform a business concept into a thoughtful plan of action.

Who Should Take This Certificate?

- Individuals aiming to launch, or have recently launched, a small business and need skills such as developing business and marketing plans and identifying market opportunities
- Business owners that you want to scale or improve in terms of profitability or processes
- Managers, in a public, private, or nonprofit organization, wanting to effectively promote innovative product development and marketing as a workplace *intrapreneur*

What Will You Learn?

After completing this certificate, you will be able to:

- assess your own entrepreneurial potential and managerial skills
- identify opportunities and analyze best-fit markets for entry
- develop your business idea into an actionable business plan
- organize, promote, and finance a business, including bootstrap financing and government funding programs
- assess risk and opportunity in buying an existing business or franchise
- learn management strategies to deal with common business issues such as cash flow, high growth rates, outsourcing, and corporate governance

Certificate Requirements

Required Courses

[CENT 500 New Venture Startup](#)

Next Offered: Fall 2022

[CENT 505 Small-Business Management](#)

Next Offered: Winter 2023

[CENT 526 Entrepreneurial Behaviour and Strategy](#)

Next Offered: Fall 2022

[CENT 601 Identifying Opportunities](#)

Next Offered: Fall 2022

Electives (select 2)

You must consult with the [academic coordinator](#). With the submission of an approved Continuing Education Certificate Exemption (Substitution/Directive) Form signed by the academic coordinator, you will complete 2 courses relevant to your entrepreneurial and small business interests (as indicated in your business plan developed in [CENT 500](#)).

- 4 required courses
- 2 electives*
- Cumulative grade point average (GPA) of 1.67+

*You must consult with the academic coordinator. With the submission of an approved Continuing Education Certificate Exemption (Substitution/Directive) Form signed by the academic coordinator, you will complete 2 courses relevant to your entrepreneurial and small business interests (as indicated in your business plan developed in CENT 500).

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria

—

Recommended:

- Ontario Secondary School Diploma (OSSD) or equivalent
 - With 6 Grade 12 U or M credits

OR

- Mature student status

If you are an undergraduate student, you should be aware of possible certificate restrictions. Check [Curriculum Advising](#) [↗](#) for complete details.

Frequently Asked Questions

+

Awards and Financial Aid

+

Contact Us

+

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Ethics

Certificate

FULLY ONLINE



Help to defend and monitor ethical decision-making in your organization. Develop a knowledge and practice in applied ethics to develop personal and organizational codes of ethics. Learn to recognize, counsel, and train in analyzing and resolving ethical dilemmas.

The Certificate in Ethics is designed to provide you with relevant, university-level education if your career requires the ability to apply the principles of ethics in private and public sector organizations.

You may also be interested if you simply want to deepen your philosophical and ethical understanding.

Many of the courses in this certificate program are available in a fully online format.

Note to students registered in this certificate program: Effective Fall 2020, the Certificate in Ethics has been revised. Students who were formally registered in the certificate prior to July 2, 2020, must complete the curriculum requirements that were in effect at the time of their registration. For curriculum details, please refer to the [archived calendar](#) for your year of registration.

- CENG 520 has been removed as an elective

What Will You Learn?	+
Who Should Take This Certificate?	+
Who Teaches the Courses?	+
Industry and Careers	+

Register now

Required Course

[COPH 200 Ethics Capstone Course](#)

Next Offered: Fall 2022

Electives – Group A (select 2)

[CPHL 302 Ethics and Health Care](#)

Next Offered: Fall 2022

[CPHL 307 Business Ethics](#)

Next Offered: Fall 2022

[CPHL 400 Human Rights and Justice](#)

[CPHL 444 Ethics in Health Services Management](#)

[CPHL 449 Philosophy of Punishment](#)

[CPHL 500 Philosophy of the Natural Environment](#)

Next Offered: Spring/Summer 2022

[CPHL 503 Ancient and Modern Ethics](#)

[CPHL 509 Bioethics](#)

Next Offered: Fall 2022

[CPHL 525 Environmental Ethics](#)

[CPHL 530 Media Ethics](#)

[CPHL 603 Fundamentals of Ethics](#)

Next Offered: Spring/Summer 2023

[CPHL 612 Philosophy of Law](#)

Next Offered: Fall 2022

[CPHL 614 Philosophy of Human Rights](#)

Electives – Group B (select 3 not previously taken in Electives – Group A)

[CCRM 200 Criminal Law](#)

Next Offered: Fall 2022

[CCRM 322 Ethics in Criminal Justice](#)

[CENG 321 Introduction to Law](#)

Course Delivery Schedule	+
Certificate Requirements	—
<ul style="list-style-type: none">• 1 required course• 5 electives*• Cumulative grade point average (GPA) of 1.67+ <p>*You must take 2 selections from Electives – Group A and 3 selections from Electives – Group B (that you haven't already taken in Electives – Group A).</p> <p>To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our Glossary of Terms. If certificate requirements change and courses are no longer available, you may request Course Substitutions/Directives. You must apply to graduate on my.ryerson (RAMSS) within the appropriate application deadlines (refer to Important Dates). Visit Graduation for details.</p>	
Recommended Course Sequence	+
Admission Criteria	—
<p>Recommended:</p> <ul style="list-style-type: none">• Ontario Secondary School Diploma (OSSD) or equivalent<ul style="list-style-type: none">◦ With six Grade 12 U or M credits <p>OR</p> <ul style="list-style-type: none">• Mature student status	
Awards and Financial Aid	+
Contact Us	+

[CECN 321 Introduction to Law and Economics](#)

Next Offered:Fall 2022

[CECN 502 Economics of Energy and Natural Resources](#)

[CECN 510 Environmental Economics](#)

[CENG 621 Women's Texts, Global Contexts](#)

[CGMS 802 Ethics and Regulation of Int'l Bus](#)

Next Offered:Winter 2023

[CHST 602 Propaganda!](#)

Next Offered:Spring/Summer 2022

[CINT 905 Conflict Resolution in Community Services](#)

Next Offered:Spring/Summer 2022

[CLAW 122 Business Law](#)

Next Offered:Fall 2022

[CLAW 525 The Law of the Marketplace](#)

Next Offered:Spring/Summer 2023

[CLAW 529 Employment and Labour Law](#)

Next Offered:Fall 2022

[CLAW 603 Advanced Business Law](#)

Next Offered:Spring/Summer 2022

[CMHR 600 Diversity and Inclusion in the Workplace](#)

[CMHR 640 Leadership](#)

[CODG 130 Legal and Ethical Issues in GIS and Digital Data](#)

[CPHL 302 Ethics and Health Care](#)

Next Offered:Fall 2022

[CPHL 307 Business Ethics](#)

Next Offered:Fall 2022

[CPHL 400 Human Rights and Justice](#)

[CPHL 401 Philosophy and Mass Culture](#)

[CPHL 444 Ethics in Health Services Management](#)

[CPHL 500 Philosophy of the Natural Environment](#)

Next Offered:Spring/Summer 2022

[CPHL 503 Ancient and Modern Ethics](#)

[CPHL 507 Ethics and Disability](#)

[CPHL 509 Bioethics](#)

Next Offered:Fall 2022

[CPHL 525 Environmental Ethics](#)

[CPHL 530 Media Ethics](#)

[CPHL 602 Health Policy: Ethics and Justice](#)

[CPHL 603 Fundamentals of Ethics](#)

Next Offered:Spring/Summer 2023

[CPHL 612 Philosophy of Law](#)

Next Offered:Fall 2022

[CPHL 614 Philosophy of Human Rights](#)

[CPHL 621 Non-Western Philosophy](#)

[CPHL 921 Intellectual Property and Technology](#)

[CPOG 424 Human Rights and Global Politics](#)

[CPPA 301 Administrative Law](#)

Next Offered:Fall 2022

[CPSY 124 Social Psychology](#)

[CPSY 300 Psychology and Law](#)

Next Offered:Spring/Summer 2022

[CPSY 518 Environmental Psychology](#)

[CPSY 706 Personal Growth and Positive Psychology](#)

Next Offered:Fall 2022

[CPSY 802 Death, Dying and Bereavement](#)

Next Offered:Winter 2023

[CPSY 808 Community Psychology](#)

Next Offered:Spring/Summer 2023

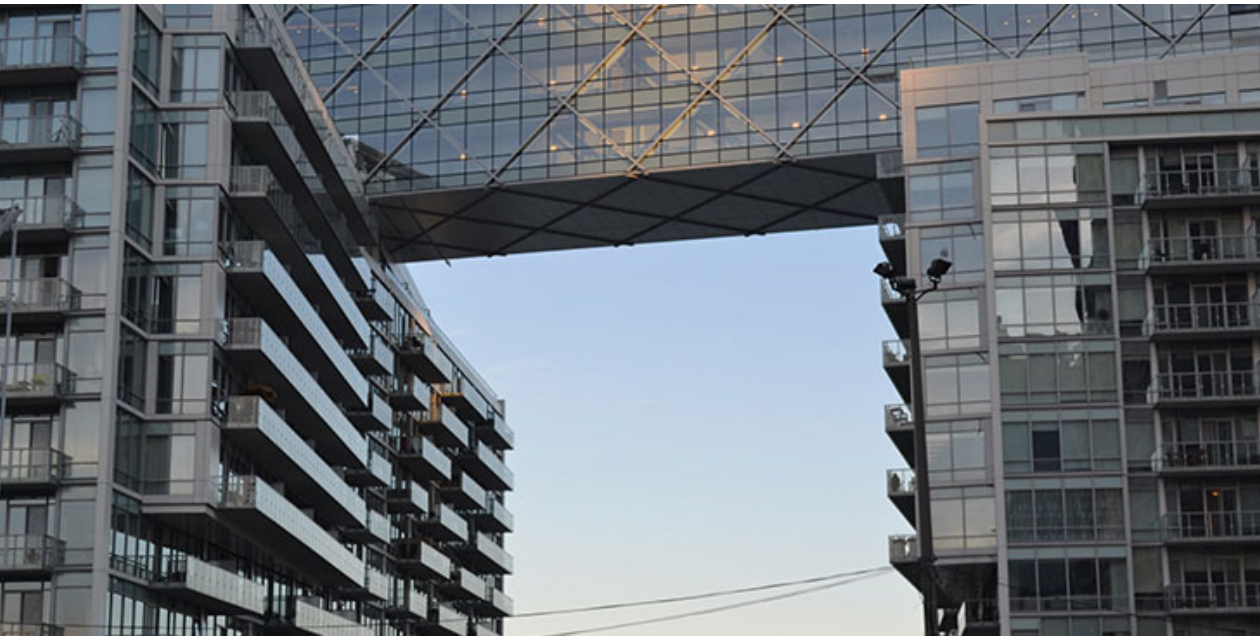
[CSOC 609 Women and Human Rights](#)

[CSOC 705 Law and Justice](#)

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Facility and Property Management

Certificate



Equip yourself with the most important skills necessary for the facility and property management profession.

Almost every organization occupies buildings. These buildings serve as offices, warehouses, manufacturing centres, data centres, or other facilities to support business needs. Every building needs someone to manage it, whether it is a commercial office building, shopping mall, warehouse or data centre.

Facility managers and property managers are involved in issues including:

- technical
- environmental
- human resources
- space and leasing
- real estate strategy

They provide productive, safe, comfortable work environments for their organization’s employees.

This certificate program can help you achieve your professional goals in an interesting and rewarding career. It combines direct facility and property management skills with the broader business and management knowledge needed to thrive in the profession.

This program offers the following benefits:

- **Enrol right away – open admissions with no application required**
- **Take courses in any order – no prerequisites needed**
- **Take Ryerson degree-credit courses**
- **Apply for merit-based awards**

Not ready to enrol but want to learn more?

Fill out this form and a representative from The Chang School will contact you.

Express Interest

Register now

Required Courses: 39-Hour Courses (select 6)

2 19.5-hour courses may be completed as the equivalent of 1 39-hour course.

[CDFM 102 Facility Management Fundamentals](#)

Next Offered: Fall 2022

[CDFM 103 Project Planning, Design, and Management](#)

Next Offered: Fall 2022

[CDFM 104 Building Operations and Maintenance](#)

Next Offered: Winter 2023

[CDFM 105 Space Planning and Management](#)

Next Offered: Spring/Summer 2023

[CDFM 106 Leadership, Strategy, Business](#)

Next Offered: Fall 2022

[CDFM 107 Recruiting and Managing Employees and Procuring Contractors](#)

Next Offered: Fall 2022

19.5-Hour Courses

2 19.5-hour courses may be completed as the equivalent of 1 39-hour course.

[CDFM 110 Leasing and Lease Administration](#)

Next Offered: Spring/Summer 2022

[CDFM 111 Capital and Asset Management](#)

Next Offered: Winter 2023

[CDFM 112 Risk, OHS, Regulations, and the Law](#)

Next Offered: Spring/Summer 2023

[CDFM 113 Sustainability in Facilities](#)

Next Offered: Spring/Summer 2023

[CDFM 114 Real Estate Planning and Development](#)

Next Offered: Winter 2023

What Will You Learn?

Who Should Take This Certificate?	+
Who Teaches the Courses?	+
Industry and Careers	+
Certificate Requirements	—
<ul style="list-style-type: none">Six required courses<ul style="list-style-type: none">Two 19.5-hour courses are considered equivalent to one 39-hour courseCumulative grade point average (GPA) of 1.67+ <p>To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our Glossary of Terms. If certificate requirements change and courses are no longer available, you may request Course Substitutions/Directives. You must apply to graduate on my.ryerson (RAMSS) within the appropriate application deadlines (refer to Important Dates). Visit Graduation for details.</p>	
Admission Criteria	—
<p>Recommended:</p> <ul style="list-style-type: none">Successful completion of a minimum two-year post-secondary program <p>OR</p> <ul style="list-style-type: none">Mature student status with related professional experience and education	
Recommended Course Sequence	+
Awards and Financial Aid	+
Frequently Asked Questions	+
Contact Us	+

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Fashion Coordination and Styling



The Certificate in Fashion Coordination and Styling will not be accepting any new registrants. This certificate has been discontinued effective Fall 2021. Students formally registered in the certificate prior to July 2, 2021 must complete the program requirements in effect at the time they registered.

For more information, please contact ce@ryerson.ca.

If this certificate interests you, you may want to check out our new [Certificate in Fashion Innovation](#).

Register now ▶

Required Courses —

- [CDFC 101 Fashion Coordination](#)
- [CDFC 102 Fashion Styling](#)
- [CDFC 103 Design Fundamentals in Fashion](#)
- [CDFC 104 Creating the Image](#)

Electives (select 4) —

- [CCMN 373 Fashion Communication: Professional Approaches](#)
- [CDFA 104 Fashion Drawing I](#)
- [CDFA 110 Fashion Drawing II](#)
- [CDFC 105 Fashion Shows and Special Events](#)
- [CDFC 106 Fashion, Culture, and Society](#)
- [CDFC 107 Fashion Buying](#)
- [CDFC 200 Fashion Photography](#)
- [CENT 500 New Venture Startup](#)
Next Offered: Fall 2022
- [CFSN 703 Visual Merchandising and Display](#)
- [CMKT 100 Principles of Marketing](#)
Next Offered: Fall 2022

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Fashion Innovation

Certificate

FULLY ONLINE

Fashion is in a state of disruption. For a successful career in this industry, it's crucial to not only keep pace but be three steps ahead. Fashion brands are looking to hire innovative talent who can connect with consumers in unique and unexpected ways and help their company make critical business decisions in response to the impacts of technology, social media, and progressive consumer values. With our Certificate in Fashion Innovation, prime yourself with the in-demand knowledge and competencies that fashion hiring managers will be looking for.



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Required

[CDFI 100 Events and Digital Experiences](#)

Next Offered: Winter 2023

[CDFI 200 Visually Speaking](#)

Next Offered: Winter 2023

[CDFI 300 Fashion Research and Analytics: An Introduction](#)

Next Offered: Winter 2023

[CDFI 400 Fashion Innovation Project](#)

Next Offered: Fall 2022

[CFSN 105 Fashion Systems I](#)

Next Offered: Fall 2022

[CFSN 223 Fashion Theory](#)

Next Offered: Fall 2022

Industry and Careers

This certificate can help you build the skills needed to become employed in the following areas:

- Trend forecasting
- Merchandising
- Fashion buying
- Events management
- Fashion journalism/Magazine contributor
- Styling
- Brand coordination/management

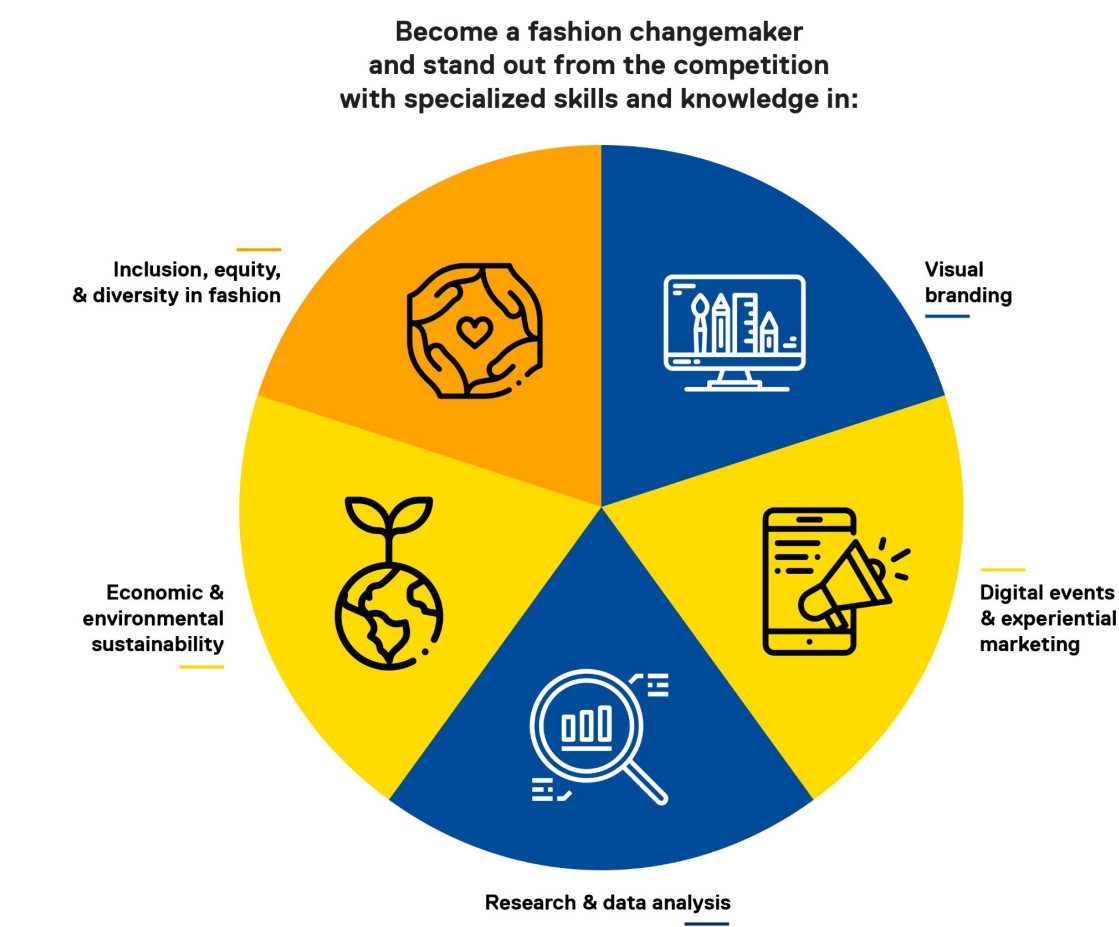
Who Should Take This Certificate?

- Those working in retail looking for career advancement in the fashion industry.
- People who have a passion for fashion and want to complement their existing education or professional experience in the following areas:
 - Marketing/event planning
 - Business management/entrepreneurship
 - Design management
 - Research and analytics
 - Public relations
 - Journalism/professional communication
 - User experience (UX) or user interface (UI)
 - Those interested in Ryerson University's School of Fashion undergraduate program, but unsure if they want to apply for the full program

What Will You Learn?

After completing this certificate, you will be able to do the following:


- Understand the fashion landscape and business of fashion as it aligns with core consumer/corporate values, including sustainability, equality, diversity, gender fluidity, radical inclusion, and community.
- Design and implement meaningful digital fashion experiences and in-person events that drive customer engagement and enhance brand loyalty.
- Know how to market your personal brand to win - and hold - focus in an oversaturated marketplace.
- Analyze data sets to help inform marketing and sales strategies as they apply to supply chain, consumer analytics, and trend forecasting.
- Develop a portfolio that showcases an understanding of fashion styling, including product sourcing, location shooting, organizing styling resources and more.



[Infographic Transcript](#)

Still shopping around? Here’s a list of comparative fashion programs for your one-stop shop:

School Name	Program Name	Duration	Price	Format	Affiliation
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The Chang School	Certificate in Fashion Innovation - the only fashion program in Canada focused on decolonization and sustainability	6 courses in total (3 terms), but you have the flexibility to take it at your own pace and in your preferred sequence. You have up to four years to complete the certificate so you can work while you learn. There is also a summer-intensive option available.	\$650.65 per course (~\$3900 total). No commitment to pay all at once—just pay for the courses you enrol in.	Online. Great if you prefer flexibility, the ability/freedom to work at your own pace, and receiving feedback on your own time.	Ryerson's School of Fashion, one of the top fashion schools  in the world
Seneca College	Fashion Studies (Certificate)	8 months (2 terms)	~\$4,500 for full program	Hybrid (in-class and online)	<ul style="list-style-type: none"> • Apparel Affinity Group • Fashion Group International • Fashion Takes Action • Textile Museum of Canada • Toronto Fashion Incubator
Humber College	Fashion Management (Graduate Certificate)	3 terms	~\$5,500 for full program	Online	Association of Fashion Business Students
George Brown College	Fashion TECH (Certificate)	3 terms	Tuition funded based on eligibility	In-class (when available)	n/a
Kwantlen Polytechnic University	Fashion Design & Technology (Diploma)	4 terms	Tuition ~\$9,938 for 60 credits to earn a diploma	In-class (closed for Fall 2021)	n/a

Certificate Requirements	—
<div><div><div><div><div></div><div>6 required courses</div></div><div><div></div><div>Cumulative grade point average (GPA) of 1.67+</div></div></div></div><div><p>To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our Glossary of Terms. If certificate requirements change and courses are no longer available, you may request Course Substitutions/Directives. You must apply to graduate on my.ryerson (RAMSS) within the appropriate application deadlines (refer to Important Dates). Visit Graduation for details.</p></div></div>	
Admission Criteria	—
<div><div><div><div><div></div><div>Recommended:</div></div><div><div><div><div></div><div>Ontario Secondary School Diploma (OSSD) or equivalent</div></div><div><div></div><div>With 6 Grade 12 U or M credits (including English)</div></div></div></div><div><div>OR</div><div><div><div></div><div>Continuous learners with relevant professional experience</div></div></div></div></div></div></div>	
Awards and Bursaries	+
Partners	+
Contact Us	+

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Film Studies

Certificate

Register now

Build a solid foundation in the principles and techniques of filmmaking and developing screen-based content. You may take one or more courses or workshops or choose to pursue the full certificate program. Our Certificate in Film Studies is an excellent starting point if you want to pursue a career in film, television, and digital screen content development.

Get Connected



Industry and Careers

This certificate program is designed to provide a strong practical foundation in technical and business skills as they relate to film production.

It will provide you with an excellent opportunity to build your professional portfolio. Completing the certificate may help you attain entry-level positions within Canada's \$2 billion film and television industry.

Who Should Take This Certificate?

You may be interested if you:

- work in the film industry and want to improve your qualifications
- are new to the industry and want to better understand all aspects of production
- work in other fields and want to make a career change to enter the film industry or develop content
- work in allied fields and want to develop film production and screen media
- have a related education in theory, history, and criticism of film and want to make films or develop screen media production.

What Will You Learn?

This program is a great starting point if you want to pursue a career in the film industry or satisfy your curiosity about film and film production.

Courses range from an introduction to basic filmmaking to specialized courses such as:

- cinematography and lighting design
- directing screen performance
- film and digital production methods and techniques
- fundamentals of directing, editing, shooting and producing
- production design
- screenwriting
- sound design, location and post audio production techniques

Required Courses

[CDMP 129 Motion Picture Production I](#)

[CDMP 229 Motion Picture Production II](#)

[CMPF 107 Film Technology I](#)

[CMPF 207 Film Technology II](#)

[CMPF 423 Film Technology III](#)

[CMPF 301 Business of Film](#)

Next Offered: Spring/Summer 2022

Electives (select 2)

[CDMP 120 Film History](#)

[CDMP 121 Film Theory](#)

[CDMP 125 Fiction Screenwriting](#)

Next Offered: Fall 2022

[CDMP 126 Non-Fiction Screenwriting](#)

[CDMP 231 Short Filmmaking: On Location](#)

[CDMP 700 Advanced Screenwriting](#)

Next Offered: Winter 2023

[CFPN 323 Sound Design for Digital Media I](#)

Next Offered: Winter 2023

[CFPN 501 Scenography I: Art Direction](#)

Next Offered: Fall 2022

[CFPN 502 Directing Screen Performance - Basic Principles](#)

[CFPN 531 Cinematography and Lighting Design I](#)

[CFPN 533 Sound Design for Visual Media II](#)

[CFPN 601 Scenography II - Production Design](#)

Next Offered: Winter 2023

[CMPC 101 Visual Studies I](#)

Next Offered: Fall 2022

[CMPF 300 Film Technology IV](#)

[CMPF 302 Business of Film II](#)

- the business of developing, producing, and marketing films

Certificate Requirements

- 6 required courses
- 2 39-hour electives (or courses totalling 117 hours)
- Cumulative grade point average (GPA) of 1.67+

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria

Recommended:

- Ontario Secondary School Diploma (OSSD) or equivalent
 - With 6 Grade 12 U or M credits (including English)
 - With a minimum average of 60 percent

OR

- Mature student status with relevant professional experience

If you are an undergraduate student, you should be aware of possible certificate restrictions. Check [Curriculum Advising](#) [↗](#) for complete details.

Awards and Financial Aid

Intensive Option

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Financial Mathematics Modeling and Predictive Analytics

Certificate

[Register now](#)



This certificate is intended to provide professionals with the technical skills to perform predictive analytics. You will learn 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. You will attain a mastery of data analytics applied competencies and 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.

Learn how to determine the value of financial derivatives and complex investments. Gain skills in assessing and analyzing the associated benefits and risks of these instruments through modeling frameworks and predictive analytics.

Attain financial mathematics proficiency in the areas of stochastic processes and probability, statistics, and computation. Gain an understanding of the highly complex operations of financial markets.

If you have a background in economics, mathematics, science, engineering, or finance, this program can help you advance or change your career.

☒ Not ready to enrol but want to learn more?

Fill out this form and a representative from The Chang School will contact you.

[Express interest](#)

Required Courses

[CMTH 500 Introduction to Stochastic Processes](#)

Next Offered: Fall 2022

[CMTH 600 Computational Methods In Mathematics](#)

[CMTH 700 Financial Mathematics I](#)

[CMTH 800 Financial Mathematics II](#)

What Will You Learn?

+

Who Should Take This Certificate?

+

Who Teaches the Courses?

+

Industry and Careers

+

Recommended Course Sequence

+

Certificate Requirements

—

- 4 required courses
- Cumulative grade point average (GPA) of 1.67+

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria

—

Recommended:

- 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)

Admission Interview/Placement Assessment

An interview/placement assessment is required for this program. Please contact the Academic Coordinator, Sebastian Ferrando, at ferrando@ryerson.ca and Anne-Marie Brinsmead, Program Director, Engineering, Architecture, and Science, at a2brinsm@ryerson.ca.

If you are an undergraduate student, you should be aware of possible certificate restrictions. Check [Curriculum Advising](#) [↗](#) for complete details.

Awards and Financial Aid

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Financial Planning

Certificate

Register now ➤

The Certificate in Financial Planning will not be accepting any new registrants. This certificate has been discontinued effective Fall 2021. Students formally registered in the certificate prior to July 2, 2021 must complete the program requirements in effect at the time they registered.

For more information, please contact ce@ryerson.ca.

If this certificate interests you, you may want to check out these related certificates:

- [Accounting – Finance](#)
- [Advanced Accounting](#)
- [Business Management](#)
- [Economics and Finance](#)

Required Courses

[CACC 522 Taxation for Managers and Financial Planners](#)

[CFIN 501 Investment Analysis](#)

Next Offered: Fall 2022

[CFIN 502 Personal Financial Planning](#)

Next Offered: Fall 2022

[CFIN 512 Risk Management and Insurance](#)

Next Offered: Winter 2023

[CFIN 612 Retirement and Estate Planning](#)

Next Offered: Spring/Summer 2023

[CFIN 812 Advanced Personal Financial Planning](#)

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Food Security

Certificate

FULLY ONLINE

Food insecurity is a serious problem – in Canada and on a global scale – that requires passionate, qualified individuals to develop plans for community food security, urban food security, and sustainable food systems. Our fully online Certificate in Food Security can help you fulfil the rapidly growing demand for professionals with a knowledge and skill set in food security.

This certificate is a post-degree program and includes degree-credit and graduate degree–credit courses, so it can be used as a stepping stone from undergraduate studies to entry into master’s and PhD programs in food security or related studies.



Get Connected

Industry and Careers

This certificate can lead to career paths in various roles. Here are some examples:

- City social worker dealing with poverty and food insecurity issues
- Community development officer
- Director of a nonprofit organization
- Program leader for a food program/food bank
- Program leader for a regional health authority
- Research associate for food insecurity
- Urban farm manager

Who Should Take This Certificate?

- Working professionals with experience related to food security (public health, social work, agriculture, etc.) who wish to broaden their knowledge and skill set to expand their career opportunities
- Degree graduates looking for a stepping stone from undergraduate studies to a master’s or PhD program in food security or related studies
- Individuals who are passionate about the subject who would like to transition to careers in this field

What Will You Learn?

After completing this certificate, you will be able to do the following:

- Apply appropriate research and evaluation methods for assessing food security
- Plan and undertake assessments of household and community food security
- Determine the prevalence of hunger and food insecurity in a population

Register now

Required Courses

You may only select one of CFNP 250 or CFNY 404.

[CFNP 250 Markets, Food Systems/Food Policy](#)

[CFNY 403 Food Security Concepts and Principles](#)

Next Offered:Fall 2022

[CFNY 404 Food Policy and Programs for Food Security](#)

Next Offered:Spring/Summer 2023

[CFNY 405 Applied Research Methods and Evaluation](#)

Next Offered:Fall 2022

Electives (select 3)

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

You may only select one of CFNF 100 or CVFS 401.

You may only select one of CFNN 100 or CFNN 111.

[CFND 401 Social and Cultural Dimensions of Food](#)

[CFNF 100 Families and Health](#)

[CFNN 100 Nutrition and Health](#)

[CFNN 111 Introduction to Nutrition](#)

[CFNY 400 Selected Topics in Food Security](#)

Next Offered:Fall 2022

[CFNY 407 Community Development and Food Security](#)

Next Offered:Spring/Summer 2023

[CFNY 408 Urban Food Security](#)

Next Offered:Winter 2023

[CFNY 409 Gender and Food Security](#)

Next Offered:Fall 2022

[CFNY 510 Indigenous Food Systems in Canada](#)

Next Offered:Winter 2023

[CINT 912 Community](#)

- Design collaborative processes for building household and community food security
- Apply current economic thinking to strengthening food security
- Initiate the development of food policy and programs for a right to food
- Develop urban food production initiatives to bolster urban food systems
- Identify the requirements for creating sustainable food systems based on social justice

Certificate Requirements

- 3 required courses
- 3 electives
- Cumulative grade point average (GPA) of 1.67+

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria

Required:

- An undergraduate degree

OR

- 5 years of professional experience in a field relevant to food security work

OR

- A 3-year Baccalaureate study with a clear academic standing (at least a C average or GPA of 1.67)

Admission Interview/Placement Assessment

If you wish to apply to register for the Certificate in Food Security, 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.

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[Development: International Field Experience](#)

[CSOC 808 Sociology of Food and Eating](#)

Next Offered:Fall 2022

[CVFN 410 Understanding Urban Agriculture](#)

Next Offered:Fall 2022

[CVFN 411 Dimensions of Urban Agriculture](#)

Next Offered:Spring/Summer 2023

[CVFN 412 Practicing Urban Agriculture](#)

[CVFN 413 Urban Agriculture Policy-Making](#)

Next Offered:Winter 2023

[CVFS 401 Contemporary Family Issues](#)

Next Offered:Spring/Summer 2023

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Foundations of International Management

 Certificate

Register now ▶



As globalization impacts traditional business models, it is not uncommon for managers to engage with stakeholders working in different countries, currencies, time zones, languages, and cultures. In this context, employers across sectors are in a global war for talent, competing for professionals who have the managerial skills and cultural understanding to work effectively in today's global business environment.

Not ready to enrol but want to learn more?

Fill out this form and a representative from The Chang School will contact you.

Express interest 

In this certificate program, you will learn the basic business functions, operations, and processes of management in an international context. You will apply theory in real world case studies, simulations, and projects to demonstrate your understanding of how business is conducted in key geographic regions, taking into account the major cultural, political, and economic factors that shape approaches to business management internationally.

This program:

- offers both online and in-class learning
- is eligible for OSAP
- is comprised of degree credit courses
- includes all prerequisites for the Certificate in Advanced International Trade Management
- offers students the opportunity to apply all, or most, of the credit earned through the certificate as transfer credits to a Bachelor of Commerce program at Ryerson or at other universities (subject to admission and the requirements of the degree to which you are applying)

Note to students registered in this certificate program: Effective Fall 2020, the Certificate in Foundation of International Management has been revised. Students who were formally registered in the certificate prior to July 2, 2020, must complete the curriculum

Required Courses

[CGMS 200 Introduction to Global Management](#)

Next Offered: Fall 2022

[CGMS 400 The Global Business Environment](#)

[CGMS 401 Operations Management](#)

Next Offered: Fall 2022

[CGMS 110 Applied Mathematics for Business](#)

Next Offered: Fall 2022

requirements that were in effect at the time of their registration. For curriculum details, please refer to the [archived calendar](#) for your year of registration.

What Will You Learn?	+
Who Should Take This Certificate?	+
Who Teaches the Courses?	+
Industry and Careers	+
Recommended Course Sequence	+
Certificate Requirements	—
<div><ul style="list-style-type: none">4 required coursesCumulative grade point average (GPA) of 1.67+<p>To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our Glossary of Terms. If certificate requirements change and courses are no longer available, you may request Course Substitutions/Directives. You must apply to graduate on my.ryerson (RAMSS) within the appropriate application deadlines (refer to Important Dates). Visit Graduation for details.</p></div>	
Admission Criteria	—
<div><div>Recommended:</div><div><ul style="list-style-type: none">Ontario Secondary School Diploma (OSSD) or equivalent<ul style="list-style-type: none">With six Grade 12 U or M credits</div><div>OR</div><div><ul style="list-style-type: none">Mature student status</div><p>If you are an undergraduate student, you should be aware of possible certificate restrictions. Check Curriculum Advising ↗ for complete details.</p></div>	
Awards and Financial Aid	+
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Fundamentals of Interior Design

Certificate

Register now

Hone your design thinking skills to better communicate design intent within the interior design industry and the field of spatial design. The program will also introduce you to the traditional and contemporary skill sets used in the development of interior decor and space planning.

Courses increase in scope as you move through the certificate, building upon what you learn. Many courses are taught in a setting encouraging student interaction and discussion, with instructors offering a supportive environment for you to test out your design ideas and strategies.

Get Connected



Industry and Careers

Many of our learners have gone on to find work in the interior industry, including in:

- Film and set design
- Furniture design
- Product design manufacturing
- Real estate
- Sales
- Staging

Many also choose to continue in their existing careers with an enhanced communications skill set that is useful when discussing spatial and design-related work.

Note: Certified interior designers must pass the NCIDQ exam, which is administered by the Council for Interior Design Qualification (CIDQ). Completing this certificate will not enable you to write the NCIDQ exam or represent yourself as a certified interior designer. This certificate is separate from Ryerson University's [Bachelor of Interior Design \(BID\)](#) program.

Who Should Take This Certificate?

You may be interested in taking this certificate if you:

- Professionals who want to enhance your communication skills to work with designers and those in the allied construction fields
- Professionals who work in real estate, renovations, and new build projects who want to hone their design thinking skills to move up in their careers
- Individuals who are looking to kickstart their careers in:
 - Decor
 - Set design

Required Courses

[CDID 150 Design Theory](#)

Next Offered: Fall 2022

[CDID 151 Interior Design I: Drafting](#)

Next Offered: Spring/Summer 2023

[CDID 152 Interior Design I: Space Planning](#)

[CIRC 112 Introduction to Digital Communication](#)

Next Offered: Fall 2022

Electives (select 3)

[CDID 153 Interior Materials and Finishes](#)

Next Offered: Winter 2023

[CDID 155 Design Dynamics I: Portfolio 1](#)

[CDID 157 Kitchen and Bathroom Design](#)

Next Offered: Fall 2022

[CIRC 113 Introduction to Visual Communication](#)

[CIRH 101 History of Interior Design 1850 - Present](#)

- The interior industry (including furniture, building materials, lighting, floor and wall covering suppliers, and the related sales and manufacturing of the products used and selected by designers)
- Facilities planning
- Space planning

What Will You Learn?

You will be introduced to contemporary ideas of design. Through a combination of lectures and hands-on demonstrations, you will build a foundation in space planning and the design process.

The seven courses reinforce many sought-after skills, including:

- Effective presentations
- Working with colleagues in a studio setting
- Developing a proposal for a design problem
- Your instructors will help you improve your abilities in research and communication, including:
 - Rapid sketching ability
 - Integrating analog and digital processes
 - Concept development
- Design skills that are transferable across many disciplines

Certificate Requirements

- 4 required courses
- 3 electives
- Cumulative grade point average (GPA) of 1.67+

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria

Recommended:

- Ontario Secondary School Diploma (OSSD) or equivalent
 - With 6 Grade 12 U or M credits (including English and Mathematics)
 - With a minimum average of 60 percent

OR

- Mature student status

If you are an undergraduate student, you should be aware of possible certificate restrictions. Check [Curriculum Advising](#) [↗](#) for complete details.

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Fundraising Management

Certificate

FULLY ONLINE

With over 170,000 charities across Canada, fundraising has become one of the most important growth areas for nonprofit organizations. Fundraising careers have grown over the last decade and will continue to grow for the foreseeable future. Well-trained and informed fundraisers are key to building bridges between charities and donors.

[Get Connected](#)



This certificate program is designed to help you understand fundraising tools and techniques, while developing your leadership and management skills. Through this six-course program, you will gain expertise in innovative fundraising methods, nonprofit marketing and solicitations, and donor recognition. You will also learn about how to thank donors so that they continue to give generously. Become a highly skilled fundraiser, so you can help organizations surpass their financial goals and create a community of loyal supporters.

Industry and Careers

Our graduates are in high demand, and many work in local, national, and international nonprofits. Here are just a few of the positions our alumni hold today:

- Advancement officer
- Development officer
- Director of philanthropy/development
- Manager of giving
- President and CEO
- Senior development officer
- Vice president of development

Who Should Take This Certificate?

- Individuals who are emerging fundraising professionals looking to take the next career step
- Individuals looking to make the leap into fundraising from an entirely different industry
- Individuals that are passionate about raising funds for healthcare, health and wellness, or arts and culture, or increasing resources for education, sustainability, poverty reduction, or social justice, and want to turn that into a career

What Will You Learn?

After completing this certificate, you will be able to:

<https://continuing.ryerson.ca/public/category/courseCategoryCertificateProfile.do?method=load&certificateId=194813>

[Register now](#)

Required Courses

[CINP 912 Marketing for Nonprofits](#)

Next Offered: Winter 2023

[CINT 916 Introduction to Fundraising](#)

Next Offered: Fall 2022

[CVFM 201 Operations of Fundraising](#)

Next Offered: Fall 2022

[CVFM 202 Donor Centered Fundraising](#)

Next Offered: Fall 2022

Electives (select 2)

[CVFM 203 Fundraising Campaigns](#)

Next Offered: Spring/Summer 2023

[CVFM 205 Data Analytics for Fundraising](#)

Next Offered: Spring/Summer 2023

[CVFM 302 Entrepreneurial Fundraising](#)

Next Offered: Winter 2023

[CVFM 303 Annual Giving Programs](#)

Next Offered: Winter 2023

After completing the certificate, you will also be:

- Develop and implement strategies to successfully and ethically operate a fundraising program
- Identify and inform solutions to ethical issues in the charitable sector
- Analyze data and information to guide your fund development process and raise more money
- Develop annual giving, donor communication, and fundraising marketing materials
- Examine and adjust practices to emerging issues and donor-centered fundraising trends influencing today's charities
- Apply sound financial management practices to real-life situations
- Evaluate strategic fundraising plans and identify the critical elements of a well-configured database

Certificate Requirements

- 4 required courses
- 2 electives
- Cumulative grade point average (GPA) of 1.67+

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria

Recommended:

- Ontario Secondary School Diploma (OSSD) or equivalent
 - With six Grade 12 U or M credits

OR

- Mature student status

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Graphic Communications

Certificate

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Our world is highly visual. Every day we come into contact with hundreds of printed and digital graphics — from printed billboards, to interactive websites, to unique packaging holding your coffee. In our Certificate in Graphic Communications, you will learn a variety of sought-after transferable skills for many fields, turning your bright ideas into creative concepts that inform, engage, and inspire. Exercise your creative right brain and technical left brain to bring your important work to life. Work through the certificate at your own pace – in as quickly as two semesters – and get real industry experience through practicum or project-based opportunities. We will teach you the skills to help you cut through the noise, stand out, and get noticed.



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Industry and Careers

The opportunities in the graphic communications industry are diverse, in both region and role, and appeal to a wide range of interests. There are design and creative opportunities, technical machinery and computer skills-oriented jobs, as well as business and managerial roles.

This certificate can lead to career paths in various roles. Here are some examples:

- Accessibility specialist
- Graphics specialist
- Page layout artist
- Print project coordinator
- Sustainability analyst

Who Should Take This Certificate?

- Individuals considering a career change into the graphic communications industry
- Individuals who are applying for Ryerson's [Bachelor of Technology in Graphic Communications Management](#) degree
- Individuals who are looking to deepen their graphic communications knowledge to move up in their field

What Will You Learn?

After completing this certificate, you will be able to do the following:

- Prepare layouts, files, and proofs for printed and digital output, as well as print product and post-press

Required Courses

[CGCM 110 Introduction to Graphic Communications](#)

Next Offered: Spring/Summer 2023

[CGCM 120 Graphic Communications Processes 1](#)

Next Offered: Fall 2022

[CGCM 130 Design and Layout](#)

Next Offered: Spring/Summer 2022

Electives (select 3)

[CGCM 111 Graphic Communication Technologies](#)

[CGCM 121 Graphic Communications Processes 2](#)

[CGCM 210 Consumer Packaging](#)

Next Offered: Fall 2022

[CGCM 230 Typography](#)

Next Offered: Winter 2023

[CGCM 250 Binding and Finishing](#)

[CGCM 260 Digital Premedia Workflows](#)

[CGCM 360 Colour Management for Graphic Communications](#)

[CGCM 720 Magazine Production and Publishing](#)

Next Offered: Spring/Summer 2023

[CGCM 738 Photoshopped! The Art of Image Retouching](#)

Next Offered: Spring/Summer 2022

[CGCM 740 Accessibility for Graphic Communications](#)

Next Offered: Fall 2022

- Use industry-standard hardware and software to integrate printed communication with online mediums
- Demonstrate an understanding of the impact of branding, display graphics, direct marketing materials, books, magazines, and consumer packaging
- Develop creative ideation strategies, working from creative briefs, design, and layout, using industry standard software (Adobe Creative Cloud)
- Through electives, gain tools and skills in typography, sustainability, accessibility, magazine publishing, or Adobe Photoshop

Certificate Requirements

- 3 required courses
- 3 electives
- Cumulative grade point average (GPA) 1.67+

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria

Recommended:

- Ontario Secondary School Diploma (OSSD) or equivalent
 - With 6 Grade 12 U or M credits
 - With a minimum grade of 60 percent

OR

- Mature student status with relevant professional experience

If you are an undergraduate student, you should be aware of possible certificate restrictions. Check [Curriculum Advising](#) [↗](#) for complete details.

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Health Informatics

Certificate

FULLY ONLINE

Health informatics is a specialized industry experiencing rapid change and demand; rise to meet these challenges through our Certificate in Health Informatics. The field needs professionals who have balanced exposure to IT, healthcare, and management fundamentals – a combination offered by our unique and award-winning program. Through individual course specialization, you can expand your knowledge of healthcare-specific information technology to further your career in health informatics or to break into this field.



Get Connected

Industry and Careers

This certificate offers flexible elective course options for specialized pathways in data analytics, programming, securities, privacy, and information technology management.

This certificate can lead to career paths in various roles. Here are some examples:

- Clinical applications coordinator
- Clinical data manager
- Clinical project manager
- Health informatician
- Health information manager
- Health systems specialist
- Information privacy coordinator
- Quality improvement coordinator
- Records and information manager

Who Should Take This Certificate?

- Healthcare professionals who wish to formalize and expand their knowledge of industry-specific uses of information technology in order to progress in their career
- Healthcare professionals that are seeking the academic training to meet the eligibility requirements to sit for the CPHIMS-CA Certification.
- IT professionals who are interested in applying their technical skills within the health sector
- Internationally educated professionals with a background in IT or the health sector who seek a better understanding of healthcare and health information management in the Canadian context

What Will You Learn?

Register now

Required Courses

[CHIM 305 Introduction to Health Informatics](#)

Next Offered: Fall 2022

[CHIM 306 Healthcare Interoperability](#)

Next Offered: Fall 2022

[CHSM 301 The Healthcare Systems](#)

Next Offered: Fall 2022

[CHSM 305 The Management Cycle](#)

Next Offered: Fall 2022

Electives (select 3)

If you do not have a background in health information, you should complete CHIM 303. You should select CMHR 405 if you wish to pursue CMHR 650, as CHSM 437 does not provide a prerequisite for CMHR 650.

[CHIM 301 Healthcare Information Analysis](#)

Next Offered: Fall 2022

[CHIM 303 Intro to Health Coding Classification](#)

Next Offered: Spring/Summer 2023

[CHIM 307 Human-Computer Interfaces in Healthcare](#)

Next Offered: Winter 2023

[CHIM 404 Introduction to Health Economics](#)

Next Offered: Fall 2022

[CHIM 405 Issues in Health Information Management](#)

[CHIM 408 Statistics for Health Services Managers](#)

Next Offered: Winter 2023

[CHSM 437 Human Resources Management in Healthcare](#)

Next Offered: Fall 2022

[CIND 119 Introduction to Big Data](#)

Next Offered: Spring/Summer 2022

After completing this certificate, you will be able to do the following:

- Understand how information technology is applied in healthcare services, including electronic health records (EHR), eHealth, healthcare software applications, and healthcare data
- Apply fundamentals of human interaction with computers including mental models, multimedia user interface, network-based interactions, and visual design principles
- Demonstrate familiarity with healthcare coding terminologies, interoperability between diverse and distributed systems, and electronic data interchange standards
- Compare and contrast the various health systems operating within Canada and models for healthcare funding and planning
- Understand ethical issues as related to health information management
- Evaluate aspects of care provision, including provider-client relationships and integrated client-centred care

Certificate Requirements

- 4 required courses
- 3 electives*
- Cumulative grade point average (GPA) of 1.67+

*If you do not have a background in health information, you should complete CHIM 303.

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

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria

Required:

- Ontario Secondary School Diploma (OSSD) or equivalent
 - With 6 Grade 12 U or M credits

OR

- Mature student status with relevant work experience
 - With minimum of 1 year's related professional experience in the health or information technology sectors

Admission Application

You must complete an application for pre-approval and be approved before registering for your first course. To obtain an application, visit [Forms and Documents](#). The completed application, together with transcripts, may be submitted to Melissa Johnson, Program Coordinator, at m1johnso@ryerson.ca.

If you are an undergraduate student, you should be aware of possible certificate restrictions. Check [Curriculum Advising](#) [↗](#) for complete details.

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[CIND 123 Data Analytics: Basic Methods](#)

Next Offered:Spring/Summer 2022

[CITM 207 Computer-Enabled Problem Solving](#)

Next Offered:Fall 2022

[CITM 301 IT Infrastructure](#)

Next Offered:Fall 2022

[CITM 820 Information Systems Security and Privacy](#)

Next Offered:Fall 2022

[CLAW 401 Information Access and Privacy Protection](#)

Next Offered:Fall 2022

[CLAW 402 Health Information Access and Privacy](#)

Next Offered:Winter 2023

[CMHR 405 Organizational Behaviour](#)

[CMHR 523 Human Resources Management](#)

[CMHR 640 Leadership](#)

[CMHR 650 Management of Change](#)

[CQMS 210 Applied Statistics for Business](#)

Next Offered:Spring/Summer 2022

[CTEC 210 Fundamentals of Project Management](#)

Next Offered:Fall 2022

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Health Services Management

Certificate

FULLY ONLINE

Healthcare administration is one of the fastest growing occupations in today's job market. The Health Services Management Certificate will assist you with determining the most suitable healthcare management environment for you, including hospitals, long term care, community care, health clinics, dental, or medical offices. This certificate will help give you an indication of what area of management you would be suited for in a medical environment such as hospitals, clinics, dental, and medical offices.



Get Connected

Industry and Careers

This certificate can lead to career paths in roles such as:

- Assisted living administrator
- Clinical manager
- Healthcare compliance manager
- Healthcare consultant
- Healthcare financial manager
- Health information manager
- Healthcare management researcher
- Hospital administrator

Who Should Take This Certificate?

- Current and potential health care managers who are looking to increase their knowledge and skills in significant aspects of health service provision to help them move up in their careers
- Individuals looking to study in the part-time degree completion program in Health Services Management. (Many of the courses in the Health Services Management certificate program are degree credit courses and qualify for exemption.)

What Will You Learn?

The introductory Healthcare Systems course will provide you with an understanding of:

- Key foundational knowledge about how healthcare is delivered
- The responsibilities of provinces and the federal government in the allocation of healthcare services, funds and coverage
- How health information is collected and used toward decision making in healthcare.

The introductory course the Management Cycle will provide you with an understanding of:

Required Courses

[CHSM 301 The Healthcare Systems](#)

Next Offered: Fall 2022

[CHSM 305 The Management Cycle](#)

Next Offered: Fall 2022

[CHSM 407 Healthcare Financial Management](#)

Next Offered: Fall 2022

[CHSM 437 Human Resources Management in Healthcare](#)

Next Offered: Fall 2022

[CLAW 326 Law for Health Managers](#)

Next Offered: Fall 2022

Electives (select 2)

[CACC 100 Introductory Financial Accounting](#)

Next Offered: Fall 2022

[CCMN 279 Introduction to Professional Communication](#)

Next Offered: Fall 2022

[CHIM 301 Healthcare Information Analysis](#)

Next Offered: Fall 2022

[CHIM 303 Intro to Health Coding Classification](#)

Next Offered: Spring/Summer 2023

[CHIM 305 Introduction to Health Informatics](#)

Next Offered: Fall 2022

[CHIM 404 Introduction to Health Economics](#)

Next Offered: Fall 2022

[CHIM 408 Statistics for Health Services Managers](#)

Next Offered: Winter 2023

[CHSM 307 Principles of Long Term Care Service Del.](#)

Next Offered: Winter 2023

[CHSM 308 Project Management - Long Term Care](#)

- Key management principles, perspectives and functions of planning, organizing, leading, controlling and budgeting within healthcare. Additional core courses will provide students with an understanding of: Essential management information focused on human resources, financial management and law within healthcare.

Students can select from a variety of streams to further their learning in project management, health information management, long term care, and research.

Certificate Requirements

- 5 required courses
- 2 electives
- Cumulative grade point average (GPA) of 1.67+

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria

Required:

- Ontario Secondary School Diploma (OSSD) or equivalent
 - With 6 Grade 12 U or M credits

OR

- A community college diploma in a related health services field

OR

- Mature student status

Admission Application

You must complete an application for pre-approval and be approved before registering for your first course. To obtain an application, visit [Forms and Documents](#). The completed application, together with transcripts, may be submitted to Melissa Johnson, Program Coordinator, at m1johnso@ryerson.ca.

If you are an undergraduate student, you should be aware of possible certificate restrictions. Check [Curriculum Advising](#) [↗](#) for complete details.

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[CHSM 309 Trends in Long Term Care Service Delivery](#)

[CHSM 310 Institutional Structure](#)

[CHSM 330 Managerial Epidemiology for Healthcare](#)

Next Offered: Winter 2023

[CHSM 408 Program Planning and Evaluation](#)

Next Offered: Winter 2023

[CHSM 417 Research Methodology](#)

Next Offered: Fall 2022

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Health Studies

Certificate

FULLY ONLINE

The Certificate in Health Studies comprises specifically selected courses from other health-related Chang School certificate programs, such as Health Informatics, Health Services Management, Ethics, Psychology, and Aging and Gerontology. It provides a diverse set of courses that can fill gaps in your knowledge and skill set. If you are looking for depth in a particular area of study, you may instead choose to take the appropriate other health-related certificate. The Health Studies certificate will provide flexibility to choose courses that meet your professional development needs while allowing the opportunity to earn a certificate.



Get Connected

Through five elective courses in specialized streams of Health Informatics, Health Services Management, Health Ethics, Gerontology, and Psychology, learners are free to choose their own selection to equip them with specific knowledge pertinent to their personal goals or professional interests.

Industry and Careers

The Certificate in Health Studies can be used for individuals looking to transition into a health related sector with no prior experience in the field. This Certificate can be used to fill gaps in students' knowledge and skill sets around health specific content required for future educational endeavors. Students taking this Certificate will be able to garner specialized knowledge from a variety of health related disciplines. The Health Studies Certificate will provide students with the flexibility to advance their knowledge in related health fields that can advance their professional development needs and provide the opportunity to earn a Certificate.

Who Should Take This Certificate?

Those interested in learning more about health and the intersectional relationship between health and healthcare management, health information management, health ethics, gerontology, psychology, interdisciplinary studies and communications. Students can select from a variety of health related streams to specialize their learning.

What Will You Learn?

Completion of the Health Studies certificate will provide students with an understanding of the health impacts on special populations, specific sectors and services designed to support healthy living.

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Required Course

[CHSM 301 The Healthcare Systems](#)

Next Offered: Fall 2022

Electives (select 5)

You may only select one of CCMN 279 or CCMN 314.

You may only select one of CPHL 302 or CPHL 509.

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

[CCMN 279 Introduction to Professional Communication](#)

Next Offered: Fall 2022

[CCMN 314 Professional Presentations](#)

Next Offered: Fall 2022

[CHIM 301 Healthcare Information Analysis](#)

Next Offered: Fall 2022

[CHIM 303 Intro to Health Coding Classification](#)

Next Offered: Spring/Summer 2023

[CHIM 305 Introduction to Health Informatics](#)

Next Offered: Fall 2022

[CHIM 306 Healthcare Interoperability](#)

Next Offered: Fall 2022

[CHIM 307 Human-Computer Interfaces in Healthcare](#)

Next Offered: Winter 2023

[CHIM 408 Statistics for Health Services Managers](#)

Next Offered: Winter 2023

[CHSM 305 The Management Cycle](#)

Next Offered: Fall 2022

[CHSM 330 Managerial Epidemiology for Healthcare](#)

Next Offered: Winter 2023

[CHSM 437 Human Resources Management in Healthcare](#)

Next Offered: Fall 2022

Certificate Requirements	—
<div><div><div><div><div></div><div>1 required course</div></div><div><div></div><div>5 electives</div></div><div><div></div><div>Cumulative grade point average (GPA) of 1.67+</div></div></div></div><div><p>To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our Glossary of Terms. If certificate requirements change and courses are no longer available, you may request Course Substitutions/Directives. You must apply to graduate on my.ryerson (RAMSS) within the appropriate application deadlines (refer to Important Dates). Visit Graduation for details.</p></div></div>	
Admission Criteria	—
<div><div><div><div><div></div><div>Required:</div></div><div><div><div><div></div><div>Ontario Secondary School Diploma (OSSD) or equivalent</div></div><div><div></div><div>With 6 Grade 12 U or M credits</div></div></div></div><div><div>OR</div><div><div><div></div><div>A related professional development award</div></div></div></div><div><div>OR</div><div><div><div></div><div>Mature student status</div></div></div></div></div><div><p>If you are an undergraduate student, you should be aware of possible certificate restrictions. Check Curriculum Advising ↗ for complete details.</p></div></div></div>	
Awards and Financial Aid	+
Contact Us	+

[CINT 904 Health Promotion and Community Development](#)

Next Offered:Fall 2022

[CINT 930 Aging: From Cells to Society](#)

Next Offered:Fall 2022

[CINT 935 Ethical/Legal Frameworks in Aging](#)

Next Offered:Winter 2023

[CINT 945 Technology and Aging Populations](#)

Next Offered:Fall 2022

[CLAW 402 Health Information Access and Privacy](#)

Next Offered:Winter 2023

[CPHL 302 Ethics and Health Care](#)

Next Offered:Fall 2022

[CPHL 444 Ethics in Health Services Management](#)

[CPHL 509 Bioethics](#)

Next Offered:Fall 2022

[CPHL 602 Health Policy: Ethics and Justice](#)

[CPSY 102 Introduction to Psychology I](#)

Next Offered:Spring/Summer 2022

[CPSY 105 Perspectives in Psychology](#)

Next Offered:Fall 2022

[CPSY 325 Psychological Disorders](#)

Next Offered:Fall 2022

[CPSY 605 Psychology of Health and Health Care](#)

Next Offered:Winter 2023

[CPSY 607 Drugs and Human Behaviour](#)

Next Offered:Fall 2022

[CPSY 802 Death, Dying and Bereavement](#)

Next Offered:Winter 2023

[CPSY 805 Adjustment, Stress and Coping](#)

Next Offered:Fall 2022

[CPSY 808 Community Psychology](#)

Next Offered:Spring/Summer 2023

[CTEC 210 Fundamentals of Project Management](#)

Next Offered:Fall 2022

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Human Resources Management

Certificate

Register now

Pivot your career to a meaningful field full of opportunities: human resources. HR professionals and their role in recruitment, training, and motivation are a critical part of any functioning organization. Whether you're working in business and need further education in HR to transition your career, or you're looking to take your existing HR skill set to new heights, our Certificate in Human Resources Management will set you up for success.

Get Connected



If you're looking for further HR accreditation, you can also take courses that qualify for exemptions in the Certified Human Resources Professional (CHRP) designation offered by the [Human Resources Professionals Association](#). Our graduates complete their certificates confident that they can assume a variety of HR functions in need in every industry sector.

Industry and Careers

The transferability of skills among employers and industries is a major benefit of working as an HR professional.

This certificate can lead to career paths in various fields. Here are some examples:

- Change management
- Compensation and benefits
- Diversity and inclusion
- Health and safety
- HR consulting
- Labour relations
- Learning and development
- Organization development
- Talent management

Who Should Take This Certificate?

- HR professionals who wish to upgrade their skills for a promotion or to obtain the CHRP designation
- Individuals not working in HR but who aim to join the field
- Individuals working in a business role who require further education to pivot to a specialty in HR

What Will You Learn?

After completing this certificate, you will be able to do the following:

- Manage a diverse workforce

Required Courses

[CMHR 405 Organizational Behaviour](#)

[CMHR 523 Human Resources Management](#)

Electives (select 4)

[CLAW 529 Employment and Labour Law](#)

Next Offered: Fall 2022

[CMHR 522 Union Management Relations](#)

[CMHR 600 Diversity and Inclusion in the Workplace](#)

[CMHR 623 Recruitment and Selection](#)

Next Offered: Spring/Summer 2022

[CMHR 671 Human Resources Information Systems](#)

[CMHR 711 Occupational Health and Safety](#)

Next Offered: Spring/Summer 2022

[CMHR 733 Training and Development](#)

Next Offered: Spring/Summer 2022

[CMHR 749 Compensation Management](#)

Next Offered: Spring/Summer 2022

[CMHR 849 Human Resources Planning](#)

- Strategically recruit, retain, and promote employees
- Train and develop employees
- Foster an inclusive and ethical work environment
- Create a workplace that is compliant with current health and safety standards

Certificate Requirements



- 2 required courses
- 4 electives
- Cumulative grade point average (GPA) of 1.67+

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria



Recommended:

- Ontario Secondary School Diploma (OSSD) or equivalent
 - With 6 Grade 12 U or M credits

OR

- Mature student status with relevant professional experience in business

If you are an undergraduate student, you should be aware of possible certificate restrictions. Check [Curriculum Advising](#) [↗](#) for complete details.

Professional Designations and Accreditation



Awards and Financial Aid



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Image Arts (with specializations in Film Studies or Photography Studies)

 Certificate

Important Note: The Certificate in Image Arts will not be accepting any new registrants. This certificate has been discontinued effective Winter 2022. Students formally registered in the certificate prior to November 2, 2021 must complete the program requirements in effect at the time they registered. For curriculum details, please refer to the [archived calendar](#) for your year of registration. For more information, please contact ce@ryerson.ca.

If this certificate interests you, you may want to check out our Certificates in [Digital Art Production](#), [Photography Studies](#) and [Film Studies](#).

Register now

Required Courses

[CMPC 101 Visual Studies I](#)

Next Offered: Fall 2022

[CMPC 103 Art and the Classical Tradition](#)

Next Offered: Fall 2022

[CMPC 201 Visual Art: Concepts and Theories](#)

Next Offered: Winter 2023

[CMPC 203 Art in the Modern World](#)

Next Offered: Winter 2023

Specialization in Film Studies

This certificate offers specializations in either Film Studies or Photography Studies. Complete the following courses to achieve the Specialization in Film Studies.

[CDMP 129 Motion Picture Production I](#)

[CMPF 107 Film Technology I](#)

Specialization in Photography Studies

This certificate offers specializations in either Film Studies or Photography Studies. Complete the following courses to achieve the Specialization in Photography Studies.

[CDFP 328 Photography Production I](#)

Next Offered: Fall 2022

[CDFP 329 Photography Production II](#)

Next Offered: Spring/Summer 2022

[CDFP 333 Photography and Digital Imaging](#)

Next Offered: Winter 2023

[CDFP 358 Photography and the Screen](#)

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Indigenous Child and Youth Engagement

Certificate

FULLY ONLINE

Indigenous community workers can have a significant impact on the lives of the Indigenous children and youth they support and also have a positive effect on their entire community. Indigenous community workers interested in post-secondary education and upskilling may not have access to these learning opportunities, especially while they're working to create meaningful change in their communities.

The Certificate in Indigenous Child and Youth Engagement provides a bridging of both those worlds – connecting education to direct employment in your own home community. When you enrol in the certificate courses, you'll be able to participate in post-secondary education and still continue your current work and activities in the community allowing you to stay connected to your community, family, and culture. Plus, you can take what you've learned and apply it in real time to your practice.



Enrolment for this certificate is currently limited to students who are part of the Right to Play organization (see the [Partners tab](#) below for more details).

Industry and Careers

This certificate can help you build the skills you need to pursue opportunities in the following areas and jobs:

- Community-based youth and family work
- Community outreach
- Family support worker
- Youth justice worker School-based child and youth work
- Child and youth counsellors

This certificate can also help an Indigenous CYC worker on the pathway to a degree program within the School of Child and Youth Care at Ryerson University.

Who Should Take This Certificate?

- Indigenous child and youth workers who are currently employed or volunteering in youth work with an Indigenous-led organization.

What Will You Learn?

- Explore life-space youth work practice and gain perspectives on healing and

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Required Courses

[CCYC 405 Therapeutic Foundations](#)

Next Offered: Winter 2023

[CCYC 406 Therapeutic Life-Space](#)

Next Offered: Fall 2022

Required Experiential Courses

[CVCY 300 Experiential Learning 1](#)

Next Offered: Winter 2023

[CVCY 400 Experiential Learning 2](#)

Next Offered: Spring/Summer 2023

therapeutic experiences for young people.

- Understand the design, implementation, and evaluation of youth-centered community-based programs.
- Use a range of culturally appropriate strategies to engage young people in Indigenous contexts.
- Translate ideas and approaches from your learnings and apply them directly to your practice within your own community.

This entire certificate is taught through an Indigenous lens and designed to be relevant to Indigenous communities.

Certificate Requirements	—
<div><ul style="list-style-type: none">• 4 required courses• Cumulative grade point average (GPA) of 1.67+<p>To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our Glossary of Terms. If certificate requirements change and courses are no longer available, you may request Course Substitutions/Directives. You must apply to graduate on my.ryerson (RAMSS) within the appropriate application deadlines (refer to Important Dates). Visit Graduation for details.</p></div>	
Admission Criteria	—
<div><p>Recommended:</p><ul style="list-style-type: none">• Indigenous continuous learners with relevant professional experience<p>OR</p><ul style="list-style-type: none">• Indigenous learners with an Ontario Secondary School Diploma (OSSD) or equivalent<ul style="list-style-type: none">◦ With six Grade 12 U or M credits (including English)◦ With a minimum average of 60 percent<p>If you’re interested in this certificate but unsure about eligibility, please email Kiaras Gharabaghi, Academic Coordinator, at k.gharabaghi@ryerson.ca.</p></div>	
Partners	+
Contact Us	+

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Indigenous Knowledges and Experiences

 Certificate

FULLY ONLINE

The impact of Canadian laws, policies, and practices on Indigenous Peoples and communities in Canada is a critically important part of our history and current culture. The lives of Indigenous Peoples continue to be affected by challenges in areas such as healthcare, social services, employment, and education. How do we bring about meaningful change? Build real-world experience through this unique, award-winning program that will help you be part of the way forward..

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Career Pathways

This certificate can help you pursue job opportunities or advance your career in the following areas:

- Community workplaces and professional disciplines that engage with Indigenous communities, agencies, and people
- Public or private sector roles in fields including social work, health sciences, education, policy, law, geography, human resources, community leadership, and more

Who Should Take This Certificate?

If you want to gain knowledge about key issues such as Indigenous health and well-being, governance, literature, community relations, and land use in Canada, as well as the skills to work in or advance your career in these areas, this certificate is designed for you. It is intended for both Indigenous and non-Indigenous learners.

It is also ideal if you:

- Work in or want to advance your career in fields and professional disciplines that engage with Indigenous communities and agencies, including social work, health sciences, education, policy, law, geography, human resources, or community leadership
- Want to work in occupations that address, or should address, Indigenous concerns in public, private, and not-for-profit sector organizations

Don't have post-secondary education? You can pursue this university-level certificate with a secondary school diploma. View the Admission Criteria tab for more details.

What Will You Learn?

Gain new knowledge and insights by exploring Indigenous lived experiences and perspectives. Learn how to:

- Build and apply your critical awareness of yourself in relation to Indigenous Peoples,

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Required Courses

[CINT 922 Intro to Aboriginal Worldviews](#)

Next Offered:Fall 2022

[CINT 923 Canada's Story: An Aboriginal Perspective](#)

Next Offered:Fall 2022

Electives (select 2)

[CCLD 450 Indigenous Early Learning](#)

[CCYC 905 An Indigenous Perspective on CYC](#)

Next Offered:Winter 2023

[CENG 203 The Literature of Indigenous Peoples](#)

Next Offered:Fall 2022

[CENG 511 The Art of Writing Life](#)

Next Offered:Fall 2022

[CFNY 510 Indigenous Food Systems in Canada](#)

Next Offered:Winter 2023

[CINT 910 Aboriginal Peoples, Pol. and Reconciliation](#)

Next Offered:Fall 2022

[CMWF 108 Aboriginal Childbearing](#)

Next Offered:Winter 2023

[CNPf 574 Aboriginal Visual Culture in Canada](#)

[CPPA 124 Indigenous Politics and Governance](#)

Next Offered:Fall 2022

[CSWP 925 Strong Helpers' Teachings](#)

Next Offered:Winter 2023

[CSWP 933 Indigenous Health and Well Being](#)

Next Offered:Fall 2022

[CVSW 932 Indigenous Knowledges in Practice](#)

Next Offered:Fall 2022

experiences, and worldviews

- Assess and understand the relationship between Indigenous Peoples and the Canadian government
- Synthesize and communicate how Indigenous Peoples have been impacted by laws, policies, and practices in the health, social services, human resources, and other sectors
- Execute projects within community agencies and organizations

Certificate Requirements

- 2 required courses*
- 2 electives
- Cumulative grade point average (GPA) 1.67+

*If you are an undergraduate student who has completed SWP 435, you may apply for a course substitution towards CINT 922. However, if you complete INT 922/CINT 922, you may not apply for a course substitution towards SWP 435.

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria

Recommended:

- Ontario Secondary School Diploma (OSSD) or equivalent
 - With 6 Grade 12 U or M credits (including English)
 - With a minimum average of 70 percent

OR

- Mature student status

Note: If you do not meet the above stated admission criteria, you may seek advice and assistance from [Spanning the Gaps – Access to Post-Secondary Education](#) or from [Ryerson Aboriginal Student Services](#) [↗](#).

Frequently Asked Questions

Awards and Financial Aid

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Information Systems Management

Certificate

FULLY ONLINE

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 that 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.



Get Connected

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 Business Technology Management degree program.

Industry and Careers

This certificate can lead to career paths in roles such as:

- App developer
- Database administrator
- Data scientist
- Information security analyst
- IT manager
- Librarian
- Search engine optimization specialist
- Search marketing strategist

Who Should Take This Certificate?

- Individuals looking to get into the IT management field
- Individuals looking to transition to a more specialized certificate or to the Business Technology Management degree program. (The number of eligible courses that can be used towards the degree will depend on the curriculum in effect at the time of admission to the degree program.)

What Will You Learn?

This certificate introduces business information systems, data representation and processing, and data management systems, as well as the key concepts, techniques, and methodologies relevant to developing information systems (IS), and the IT infrastructure.

Register now

Required Courses

You may only select one of CITM 100 or CITM 102.

[CITM 100 Foundations of Information Systems](#)

Next Offered: Fall 2022

[CITM 102 Business Information Systems I](#)

Next Offered: Fall 2022

[CITM 207 Computer-Enabled Problem Solving](#)

Next Offered: Fall 2022

[CITM 301 IT Infrastructure](#)

Next Offered: Fall 2022

[CITM 305 Systems Analysis and Design](#)

Next Offered: Fall 2022

[CITM 500 Data and Information Management](#)

Next Offered: Fall 2022

Electives (select one)

[CITM 200 Fundamentals of Programming](#)

Next Offered: Fall 2022

[CITM 315 Server Administration](#)

Next Offered: Fall 2022

[CITM 350 Concepts of e-Business](#)

Next Offered: Fall 2022

[CITM 550 Advanced e-Business](#)

Students will learn the fundamentals of today's IT management, from data presentation and data processing to data communication and network security.

Certificate Requirements	—
<ul style="list-style-type: none">• 5 required courses• 1 elective• Cumulative grade point average (GPA) of 1.67+ <p>To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our Glossary of Terms. If certificate requirements change and courses are no longer available, you may request Course Substitutions/Directives. You must apply to graduate on my.ryerson (RAMSS) within the appropriate application deadlines (refer to Important Dates). Visit Graduation for details.</p>	
Admission Criteria	—
<p>Recommended:</p> <ul style="list-style-type: none">• Ontario Secondary School Diploma (OSSD) or equivalent<ul style="list-style-type: none">◦ With 6 Grade 12 U or M credits <p>OR</p> <ul style="list-style-type: none">• Mature student status <p>If you are an undergraduate student, you should be aware of possible certificate restrictions. Check Curriculum Advising ↗ for complete details.</p>	
Awards and Financial Aid	+
Contact Us	+

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Introduction to Community Services

Certificate

NEW FOR FALL 2020

FULLY ONLINE

Have you ever wanted to make a difference in your community but aren't sure where to start? In today's changing society, the role of community services has never been more important. Our Certificate in Introduction to Community Services will provide you with the general knowledge and skills required for the field. This full-online certificate can be done at your own pace and is flexible with your schedule so you don't have to worry about choosing between work and school.



Get Connected

Industry and Careers

This certificate can lead to career paths in roles such as:

- Adult community resource facilitator
- Behaviour support worker
- Crisis intervention worker
- Case or intake worker
- Community service or support worker
- Developmental support worker
- Drop in or shelter worker
- Family service worker
- Health support worker
- Home or residential support worker
- Probation office/community youth worker

Who Should Take This Certificate?

This certificate will be beneficial for you if you:

- Recent graduates in the faculties of arts and community services who are looking to work in the community services sector (e.g. psychology, sociology, and child and youth worker).
- Individuals with experience in the community services sector locally or internationally, but seek additional training.
- Individuals looking to change careers and develop new skill sets in the community services sector.

What Will You Learn?

After completing this certificate, you will be able to:

- Work in the front line, policy, advocacy, and as an educator to support the health and social needs of individuals, groups, and communities

Register now

Required Course

[CINT 920 Community Collaborations](#)

Next Offered: Fall 2022

Food Security Stream (select 3)

[CFNY 403 Food Security Concepts and Principles](#)

Next Offered: Fall 2022

[CFNY 408 Urban Food Security](#)

Next Offered: Winter 2023

[CFNY 510 Indigenous Food Systems in Canada](#)

Next Offered: Winter 2023

Aging and Gerontology Stream (select 3)

[CINT 901 Gerontology: Critical Issues and Future Trends](#)

Next Offered: Fall 2022

[CINT 930 Aging: From Cells to Society](#)

Next Offered: Fall 2022

[CINT 945 Technology and Aging Populations](#)

Next Offered: Fall 2022

Community Engagement Stream (select 2)

Select 2 electives from this stream and 1 elective from another stream or a general elective.

[CSWP 934 Community Engagement Foundations](#)

Next Offered: Fall 2022

[CSWP 936 Community Engagement Practices](#)

Next Offered: Fall 2022

General Elective

- Build strong communities using a holistic approach across a range of interdisciplinary fields within the community services sector, including food security, aging and gerontology, and community engagement.
- Collaborate to meet community needs by seeking novel and life-changing solutions to social problems faced in diverse community-based settings.

Certificate Requirements

- One required course
- Three electives
- Cumulative grade point average (GPA) of 1.67+

Admission Criteria

Recommended:

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 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.

Awards and Financial Aid

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Select any 3 electives across any stream or general electives.

CINT 902 Disability Issues

Next Offered:Fall 2022

CINT 904 Health Promotion and Community Development

Next Offered:Fall 2022

CINT 905 Conflict Resolution in Community Services

Next Offered:Spring/Summer 2022

CINT 907 Team Work for Community Services

Next Offered:Fall 2022

CVFS 401 Contemporary Family Issues

Next Offered:Spring/Summer 2023

CPLE 795 Local Economic Development Fundamentals

Next Offered:Fall 2022

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Landscape Design for Climate Resilience

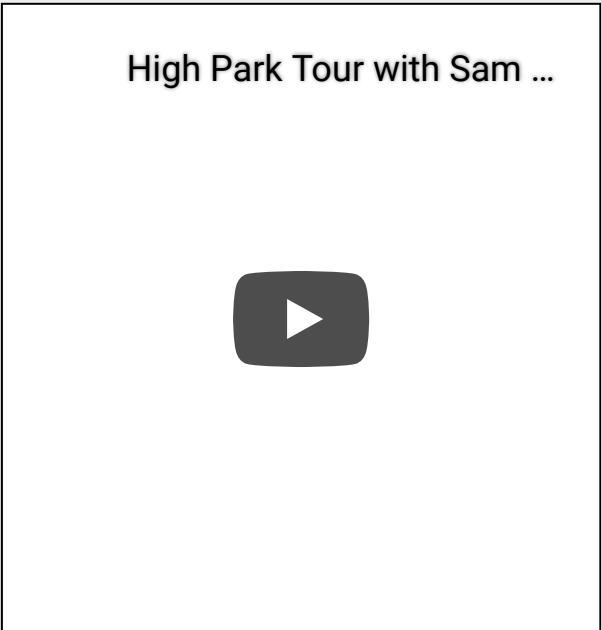
Certificate

FULLY ONLINE

Are you interested in creating sustainable landscape design projects that help preserve built and natural landscapes? Our Certificate in Landscape Design and Climate Resilience provides the educational requirements for the Certified Landscape Designer (CLD) accreditation program offered by the Canadian Nursery and Landscape Association through provincial landscape industry organizations.

The certificate, which automatically gives you membership with Landscape Ontario, can also be your first step to setting up your own business. As a student member of Landscape Ontario, you can attend member-only events, including monthly meetings of Landscape Ontario as well as receive discounts on some Landscape Ontario events.

Get Connected



Register now

Required Courses

[CKLA 310 Landscape Construction, Materials and Methods](#)

Next Offered: Fall 2022

[CKLA 320 Plant Materials](#)

Next Offered: Fall 2022

[CKLA 330 Landscape Design Studio](#)

Next Offered: Fall 2022

Electives (select 1)

[CKLA 400 Ecology and Sustainable Landscapes](#)

[CKLA 420 Art and Management of Planting Design](#)

Next Offered: Fall 2022

[CKLA 450 Landscape Restoration](#)

Next Offered: Spring/Summer 2023

Grow your expertise in this in-demand field. Learn to handle landscape design challenges with real-life solutions that are resilient, ecologically based, and socially inclusive.

Industry and Careers

Completion of this certificate can lead to roles within the following sectors:

- Nonprofit nature conservancy agencies
- Private sector: international and national construction and condominium companies, and landscaping businesses of all sizes
- Public sector: government departments at the federal, provincial, state, municipal and local levels

This certificate can lead to a career in various roles. Here are some examples:

- Industrial commercial landscape architectural technologist
- Landscape designer
- Landscape sustainability manager
- Landscape technician
- Landscaper
- Landscaping supervisor
- Nursery and grounds coordinator

Who Should Take This Certificate?

- Individuals who want to gain the core educational requirements needed to become a Certified Landscape Designer (CLD) through provincial landscape industry organizations
- Individuals with a non-landscape undergraduate degree who want to use this

program as a stepping stone to a master’s program in landscape architecture

- Architects, interior designers, or other environmental design professionals who are interested in expanding the scope of their professional work

What Will You Learn?

After completing this certificate, you will be able to do the following:

- Assess and use digital design software (such as SketchUp Suite/LayOut, DynaScape, Vectorworks, Adobe Photoshop, Adobe Illustrator, and Autodesk Civil 3D) to produce different types of landscape drawings, including functional diagrams, concept drawings, master plans, detailed design development, and working drawings
- Incorporate plant ecology knowledge into the development of planting design for climate resilience
- Develop grading and drainage designs to address runoff on urban sites related to climate change
- Generate landscape implementation and management strategies to enhance landscape resilience and sustainability
- Produce societally inclusive and resilient landscapes by integrating cultural and ecological landscape restoration techniques
- Enhance landscape inclusivity by integrating Indigenous teachings and perspectives into landscape design

[Check out what these graduates are doing after completing their certificate.](#)

Effective Fall 2021, the Certificate in Landscape Design has been revised.

Students who were formally registered in the certificate prior to July 2, 2021, must complete the curriculum requirements that were in effect at the time of their registration. For curriculum details, refer to the [archived calendar](#) for your year of registration. Please contact our Client Services team at ce@ryerson.ca if you have any questions.

Interested in transferring to the new four-course curriculum? Contact ce@ryerson.ca to find out how.

Certificate Requirements

- 3 required courses
- 1 electives
- Cumulative grade point average (GPA) of 1.67+

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria

Recommended:

- 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

Frequently Asked Questions

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Leadership in Organizations

Certificate

Important Note: The Certificate in Leadership in Organizations will not be accepting any new registrants. This certificate has been discontinued effective Winter 2022. Students formally registered in the certificate prior to Fall 2021 must complete the program requirements in effect at the time they registered. For curriculum details, please refer to the [archived calendar](#) for your year of registration. For more information, please contact ce@ryerson.ca.

If this certificate interests you, you may want to check out our Certificate in [Human Resources Management](#).

Certificate Requirements

- 2 required courses
- 4 electives
- Cumulative grade point average (GPA) of 1.67+

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria

Recommended:

- Ontario Secondary School Diploma (OSSD) or equivalent
 - With 6 Grade 12 U or M credits

OR

- Mature student status with relevant professional experience

If you are an undergraduate student, you should be aware of possible certificate restrictions. Check [Curriculum Advising](#) [↗](#) for complete details.

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Required Courses

- [CMHR 405 Organizational Behaviour](#)
- [CMHR 640 Leadership](#)

Electives (select 4)

- [CMHR 600 Diversity and Inclusion in the Workplace](#)
- [CMHR 650 Management of Change](#)
- [CMHR 700 Cross-Cultural Dimensions of Organizational Behaviour](#)
- [CMHR 721 Negotiation and Conflict Resolution](#)
- [CMHR 741 Managing Interpersonal Dynamics and Teams](#)
- [CMHR 841 Organization Theory and Design](#)
- [CMHR 850 Coaching, Facilitation and Internal Consulting](#)

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Level 1 Public Administration and Governance

Certificate

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FULLY ONLINE



[View a recording of the online information session for Public Administration and Governance.](#)

Enter access passcode: **HA*?zh2e** to view the video.

Learn about public sector organizations, structures, decision processes, and operations. Develop an awareness of the political forces that shape public administration and policy, and learn about the levels of government in Canada.

Gain the specialized knowledge and skills you need to advance your career in the public sector.

This program is designed for:

- those preparing for jobs or career advancement in:
 - federal, provincial, or municipal government
 - social service agencies
 - public or non-profit organizations
- managers
- administrative officers
- front-line service providers
- policy analysts

By completing this program, you will fulfil Level 1 of [Ryerson’s BA \(Honours\) in Public Administration and Governance](#).

What Will You Learn?



Who Should Take This Certificate?



Who Teaches the Courses?



Required Courses

[CPPA 101 Cdn Public Administration I: Institutions](#)

Next Offered: Fall 2022

[CPPA 102 Cdn Public Administration II: Processes](#)

Next Offered: Spring/Summer 2022

[CPPA 125 Rights, Equity and the State](#)

Next Offered: Fall 2022

Required Group 1 (select 2)

[CPPA 120 Canadian Politics and Government](#)

Next Offered: Fall 2022

[CPPA 121 Ontario Politics and Government](#)

[CPPA 122 Local Politics and Government](#)

Next Offered: Fall 2022

[CPPA 124 Indigenous Politics and Governance](#)


Next Offered: Fall 2022

Liberal Studies Elective Table A (select 1 1-term lower-level course)

Liberal Studies courses are indicated by “LL” for Lower Level and “UL” for Upper Level. Consult the [Undergraduate Calendar](#) for the complete list of Liberal Studies courses. Once you have chosen your course, return to [The Chang School website](#) to search for its availability.

[CGEN LLS One one-term Lower Level Liberal Studies Elective from Table A](#)

Professionally-Related

Industry and Careers	+
Testimonials	+
Certificate Requirements	—
<ul style="list-style-type: none">3 required courses2 courses from Required Group 11 lower-level Liberal Studies Elective from Table A2 Professionally-Related Electives from Table ICumulative grade point average (GPA) of 1.67+ <p>Note: If you wish to obtain your Level 1 Certificate in Public Administration and Governance, you must apply through the Office of Undergraduate Admissions for admission to the Public Administration and Governance BA (Honours) program. Do not use the standard continuing education certificate application. Upon completing this certificate and the Level 2 Certificate in Public Administration and Governance, you may continue your studies to earn a BA (Honours) in Public Administration and Governance  from Ryerson University.</p>	
Admission Criteria	—
<p>Recommended:</p> <ul style="list-style-type: none">Ontario Secondary School Diploma (OSSD) or equivalent<ul style="list-style-type: none">With 6 Grade 12 U or M credits (ENG4U/EAE4U is the preferred English)With a minimum grade of 60 percent (Subject to competition, candidates may be required to present averages/grades above the minimum.) <p>OR</p> <ul style="list-style-type: none">Mature student status	
Awards and Financial Aid	+
Contact Us	+

Professionally-Related Elective Table I (select 2 1-term courses from Table I)

Consult the [Undergraduate Calendar](#), Professionally-Related Electives Table I for a complete list of appropriate courses. Once you have chosen your course, return to [The Chang School website](#) to search for its availability.

[CGEN PRE Two One-Term Professionally-Related Electives from Table I](#)

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Level 2 Public Administration and Governance



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If you have already completed the [Level 1 Certificate in Public Administration and Governance](#), this **Level 2 certificate** will provide you with:

- An introduction to public policy.
- A sharpened understanding of the organization and operation of the public sector.
- Skills for career advancement within the public sector or organizations that deal with it.
- An expanded awareness of the political forces that shape public administration and policy.

Gain the specialized knowledge and skills you need to advance your career in the public sector.

This program is designed for:

- those preparing for jobs or career advancement in:
- federal, provincial, or municipal government
- social service agencies
- public or non-profit organizations
- managers
- administrative officers
- front-line service providers
- policy analysts

By completing this program, you will fulfil Level 2 of [Ryerson’s BA \(Honours\) in Public Administration and Governance](#).

What Will You Learn?	+
Who Should Take This Certificate?	+
Who Teaches the Courses?	+
Industry and Careers	+
Testimonials	+
Certificate Requirements	—
<ul style="list-style-type: none">• 1 required course• 3 courses from Required Group 1 (not previously taken in the Certificate in Level 1 Public Administration and Governance)• 1 lower-level Liberal Studies Elective from Table A• 1 Professionally-Related Elective• 2 Professionally-Related Elective from Table I• Cumulative grade point average (GPA) of 1.67+	

Required Course	—
CPPA 211 Public Policy Next Offered:Fall 2022	
Required Group 1 (select 3)	—
Choose 3 courses not previously taken in the Certificate in Level 1 Public Administration and Governance.	
CPPA 120 Canadian Politics and Government Next Offered:Fall 2022	
CPPA 121 Ontario Politics and Government	
CPPA 122 Local Politics and Government Next Offered:Fall 2022	
CPPA 124 Indigenous Politics and Governance Next Offered:Fall 2022	
CPPA 235 Theories of the State	
CPPA 303 Financial Management Next Offered:Winter 2023	
CPPA 319 Politics of Work and Labour	
Liberal Studies Elective Table A (select 1 1-term lower-level course)	—
Liberal Studies courses are indicated by “LL” for Lower Level and “UL” for Upper Level. Consult the Undergraduate Calendar for the complete list of Liberal Studies courses. Once you have chosen your course, return to The Chang School website to search for its availability.	
CGEN LLS One one-term Lower Level Liberal Studies Elective from Table A	

<p>Note: If you wish to obtain your Level 1 Certificate in Public Administration and Governance or the Level 2 Certificate in Public Administration and Governance, you must apply through the Office of Undergraduate Admissions for admission to the Public Administration and Governance BA (Honours) program. Do not use the standard continuing education certificate application. Upon completing this certificate and the Level 1 Certificate in Public Administration and Governance, you may continue your studies to earn a BA (Honours) in Public Administration and Governance from Ryerson University.</p>	
Admission Criteria	—
<p>Required:</p> <ul style="list-style-type: none">Level 1 Certificate in Public Administration and Governance	
Awards and Financial Aid	+
Contact Us	+

CECN 100 Introduction to Economics	
Professionally-Related Elective (select 1)	—
<p>CECN 101 Principles of Microeconomics</p> <p>CECN 104 Introductory Microeconomics</p> <p>Next Offered:Spring/Summer 2022</p> <p>CECN 110 The Economy and Society</p> <p>CECN 201 Principles of Macroeconomics</p> <p>CECN 204 Introductory Macroeconomics</p> <p>Next Offered:Spring/Summer 2022</p> <p>CECN 210 Understanding Economics</p> <p>CECN 320 Introduction to Financial Economics</p>	
Professionally-Related Elective Table I (select 2 1-term courses from Table I)	—
<p>Consult the Undergraduate Calendar, Professionally-Related Electives Table I for a complete list of appropriate courses. Once you have chosen your course, return to The Chang School website to search for its availability.</p> <p>CGEN PRE Two One-Term Professionally-Related Electives from Table I</p>	

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Lighting Design

Certificate

FULLY ONLINE

The right lighting design can elevate your mood, create a dramatic atmosphere, or provide a safe and healthy workspace. The lighting industry is undergoing dynamic changes due to legislative acts that limit energy budgets for new construction and retrofitting. There is an increasing need for buildings that are both environmentally responsible and ergonomically sound. Our Certificate in Lighting Design includes the opportunity to get real industry experience through a project-based course guided by an expert lighting designer.



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Industry and Careers

- Lighting agent/representative
- Lighting designer
- Manufacturer agent

Who Should Take This Certificate?

If you want to enhance your knowledge and skills in the art and science of lighting design, this certificate is designed for you. Our students come from a wide range of backgrounds, including:

- Architecture or landscape architecture
- Business
- Engineering
- Fashion
- Interior design
- Theatre design and production
- Radio and television arts

What Will You Learn?

Through your courses – including studio classes – you will investigate and develop your understanding of these key topics:

- Light sources and how they relate to the lighting design process
- Photometric calculations to analyze design applications
- Energy efficiency and management techniques
- Architectural daylight approaches
- Social and environmental aspects of lighting

Register now

Required Courses

[CDID 500 Fundamentals in Lighting](#)

Next Offered:Spring/Summer 2023

[CDID 505 Lighting Photometric Software](#)

Next Offered:Fall 2022

[CDID 520 Lighting Controls & Energy Management](#)

Next Offered:Winter 2023

[CDID 540 Daylighting Design & Techniques](#)

[CDID 560 Intermediate Lighting Design](#)

Electives (select 1)

[CDID 552 Entertainment Lighting Design](#)

[CDID 553 Lighting Design Practicum](#)

Next Offered:Winter 2023

Certificate Requirements	—
<div><div><div><div><div></div><div>5 required courses</div></div><div><div></div><div>1 elective</div></div><div><div></div><div>Cumulative grade point average (GPA) of 1.67+</div></div></div></div><p>To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our Glossary of Terms. If certificate requirements change and courses are no longer available, you may request Course Substitutions/Directives. You must apply to graduate on my.ryerson (RAMSS) within the appropriate application deadlines (refer to Important Dates). Visit Graduation for details.</p></div>	
Admission Criteria	—
<div><div><div><div><div></div><div>Recommended:</div></div><div><div></div><div>An undergraduate degree</div></div></div></div><div>OR</div><div><div><div></div><div>Mature student status with related professional experience and education</div></div></div><p>If you are an undergraduate student, you should be aware of possible certificate restrictions. Check Curriculum Advising ↗ for complete details.</p></div>	
Awards and Financial Aid	+
Our Partner	+
LIT 101: LightForm’s Tuition Reimbursement Opportunity	+
Contact Us	+

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Local Economic Development

Certificate

FULLY ONLINE

Are you interested in working to improve a community's economic health? A career in local economic development (LED) combines business administration and development as well as public administration skills with technical skills like planning, engineering, project management, airport development, real estate, marketing, and more.

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Required Courses

[CPLE 795 Local Economic Development Fundamentals](#)

Next Offered: Fall 2022

[CPLE 995 Ecn Development and Business Improvement](#)

Next Offered: Fall 2022

[CVUP 155 LED Applied Research Project](#)

Next Offered: Spring/Summer 2022

[CVUP 160 Capstone Project in LED](#)

Next Offered: Fall 2022

This four-course, fully online certificate is designed for entry-level, experienced, and advanced economic development professionals. It will prepare you to successfully address the current and emerging area of LED in the Canadian context. You may also apply courses towards the educational requirements for your [Certified Economic Developer \(EcD\)](#) certification.

Industry and Careers

The knowledge you gain in this program will assist you in pursuing additional studies or in applying your expertise to roles such as:

- BIA professional
- Business development director
- Community development and innovation director
- Economic development analyst
- Economic development and planning manager
- Economic development and tourism director
- Policy advisor for federal, provincial, or municipal government
- Program administrator
- Social enterprise consultant
- Tourism manager

Who Should Take This Certificate?

This certificate is for entry-level, experienced, and advanced LED professionals, including:

- Current undergraduate and recent graduate students in urban and regional planning
- Individuals who want to pursue a career in LED
- Practitioners working in government, community agencies, and municipalities who would like to improve their education, skills, and career opportunities
- Municipal politicians, those working in non-governmental organizations (NGO), and residential/industrial commercial realtors

What Will You Learn?

This certificate provides skill development opportunities in creativity and innovation, critical thinking and problem solving, and collaboration and flexibility, allowing you to be able to respond to current LED challenges.

After completing this certificate, you will be able to do the following:

- Apply in-depth knowledge of the economic development process
- Navigate governance as it relates to the LED structure
- Execute operations inclusive of mentoring, create partnerships, and create alliances through networking
- Conduct tactical and strategic municipal planning and build strategies
- Utilize solid communication skills to deliver presentations, media relations, and communications planning
- Create and present marketing/sales plans
- Interpret financial statements and budgets, analyze risks, and create business plans

Certificate Requirements

- 4 required courses
- Cumulative grade point average (GPA) 1.67+

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria

Recommended:

- Ontario Secondary School Diploma (OSSD) or equivalent
 - With 6 Grade 12 U or M credits (including English)
 - With a minimum average of 60 percent

OR

- An undergraduate degree

OR

- A college diploma

OR

- Mature student status with combination of relevant work and life experience

If you are an undergraduate student, you should be aware of possible certificate restrictions. Check [Curriculum Advising](#) [↗](#) for complete details.

Professional Designations and Accreditation	+
Awards and Financial Aid	+
Frequently Asked Questions	+
Contact Us	+

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Media Writing Fundamentals



The Certificate in Media Writing Fundamentals will not be accepting any new registrants. This certificate has been discontinued effective Fall 2021. Students formally registered in the certificate prior to July 2, 2021 must complete the program requirements in effect at the time they registered.

For more information, please contact ce@ryerson.ca.

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Required Courses

[CRTA 102 Creative Processes](#)

[CRTA 212 Media Writing](#)

Electives (select 5)

[CDMP 125 Fiction Screenwriting](#)

Next Offered: Fall 2022

[CDMP 126 Non-Fiction Screenwriting](#)

[CRTA 941 Dramatic Writing](#)

Next Offered: Spring/Summer 2023

[CRTA 943 Comedy Writing](#)

[CRTA 944 Writing for Animation](#)

[CRTA 945 Writing for Factual and Reality Programs](#)

Explore Our Related Options

Take this opportunity to pursue a new direction! If you'd like to continue learning with us, we have other related certificates and courses available for you to discover. Check out these options:

- Deliver effective, persuasive information and keep your organization in the know through our [Certificate in Business Communication](#)
- Sharpen your writing, interviewing, and research skills for screens both big and small through our [Certificate in Film Studies](#) screenwriting courses

[CDMP 125 - Fiction Screenwriting](#)

[CDMP 126 - Non-Fiction Screenwriting](#)

[CDMP 700 - Advanced Screenwriting](#)

While our Media Writing Fundamentals certificate has been discontinued, you can continue to take available courses from this program. Find out what's open for enrolment through the Electives list found on this page.

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Mental Health and Addictions

Certificate

Register now

Grow your knowledge in mental health and addictions and learn more about assessment, treatment, and self-help strategies within individual, group, family, and community contexts. Not only will our degree-credit courses help you build a foundation in psychology but you will gain new skills to add to your career toolkit to help you level up.

Get Connected

Meet Diana: Chang School...



Industry and Careers

This certificate can lead to career paths in roles such as:

- Psychologist
- Social worker
- Child and youth worker
- Mental health and addictions counsellor
- Mental health advocate
- Hospital administrator
- Clinical coordinator
- Counselling administrator

Who Should Take This Certificate?

- Individuals who require knowledge of mental health and addictions to enhance their work and better understand the circumstances of clients, employees, colleagues in their places of employment and volunteerism
- Students who would like to use the degree-credit courses towards completion of their undergraduate degree

What Will You Learn?

Two introductory courses will provide you with a foundation in psychology by examining the basic principles and applications to everyday experience.

You will then focus on the psychology of addictions and disorders. Some of the disorders you will explore include: depressive disorders, anxiety disorders, schizophrenia, personality disorders, and eating disorders.

Certificate Requirements

- 4 required courses
- 6 electives*
- Cumulative grade point average (GPA) of 1.67+

*Select 2 (or 3) selections from Electives – Group A and 3 (or 4) courses from Electives – Group B

Required Courses

[CPSY 102 Introduction to Psychology I](#)

Next Offered: Spring/Summer 2022

[CPSY 202 Introduction to Psychology II](#)

Next Offered: Spring/Summer 2022

[CPSY 215 Psychology of Addictions](#)

Next Offered: Spring/Summer 2022

[CPSY 325 Psychological Disorders](#)

Next Offered: Fall 2022

Electives – Group A (select 2 or 3)

You may only select 1 of CPSY 214 or CPSY 607. If you choose to take 2 courses from this category, you will need to complete 4 courses from Electives – Group B to fulfill the certificate requirements; if you take 3 courses, you will need to complete 3 courses from Electives – Group B.

[CPSY 214 Psychopharmacology](#)

[CPSY 324 Biological Psychology](#)

Next Offered: Spring/Summer 2022

[CPSY 335 Clinical Psychology](#)

Next Offered: Spring/Summer 2022

[CPSY 607 Drugs and Human Behaviour](#)

Next Offered: Fall 2022

Electives – Group B (select 3 or 4)

[CPSY 300 Psychology and Law](#)

Next Offered: Spring/Summer 2022

[CPSY 302 Child Development](#)

Next Offered: Fall 2022

[CPSY 412 Human Brain Circuitry](#)

[CPSY 602 Developmental Psychopathology](#)

Electives – Group D.

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria

Recommended:

- Ontario Secondary School Diploma (OSSD) or equivalent
 - With 6 Grade 12 U or M credits

OR

- Mature student status with 3 years of professional experience in business, community service, or industry

If you are an undergraduate student, you should be aware of possible certificate restrictions. Check [Curriculum Advising](#) [↗](#) for complete details.

Awards and Financial Aid

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[Psychopathology.](#)

Next Offered:Fall 2022

[CPSY 605 Psychology of Health and Health Care](#)

Next Offered:Winter 2023

[CPSY 620 Psychology of Immigration](#)

[CPSY 621 Psychology of Human Sexuality](#)

Next Offered:Spring/Summer 2022

[CPSY 682 Sleep](#)

Next Offered:Fall 2022

[CPSY 802 Death, Dying and Bereavement](#)

Next Offered:Winter 2023

[CPSY 805 Adjustment, Stress and Coping](#)

Next Offered:Fall 2022

[CPSY 806 Behaviour Modification](#)

[CPSY 808 Community Psychology](#)

Next Offered:Spring/Summer 2023

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Music: Global and Cultural Contexts

Certificate



Explore musical creation in all its rich diversity. Learn about complex music from around the globe – from ancient times to the modern age. Hone your skills in critical thinking, analysis, and writing. Study the ways music reflects and responds to shifting cultural, social, political, and historical environments.

If you are interested in the study and practice of music for personal enrichment, academic progress, or professional development, this program is for you.

Not ready to enrol but want to learn more?

Fill out this form and a representative from The Chang School will contact you.

Express interest

What Will You Learn?	+
Who Should Take This Certificate?	+
Who Teaches the Courses?	+
Industry and Careers	+
Testimonials	+
Certificate Requirements	—
<div><div><div>1 required course*</div><div>5 electives</div><div>Cumulative grade point average (GPA) of 1.67+</div></div><div><div>*You can select either CMUS 101 or CMUS 106 as your required course, or take both. If you choose to take both, you only need to complete four electives to fulfill the certificate requirements.</div></div></div>	

Register now

Required Courses

You can select either CMUS 101 or CMUS 106 as your required course, or take both. If you choose to take both, you only need to complete 1 course from Electives – Group A to fulfill the certificate requirements.

[CMUS 101 Intro to World and Early European Music](#)

Next Offered: Winter 2023

[CMUS 106 The Architecture of Music](#)

Next Offered: Spring/Summer 2023

Electives – Group A (select 1 or 2)

[CMUS 105 Voices Without Borders: Global Chorus](#)

[CMUS 211 Music Cultures of the City](#)

[CMUS 401 Music, Religion and Spirituality](#)

[CMUS 501 Music of World Cultures](#)

Next Offered: Fall 2022

[CMUS 520 Women in Popular Music](#)

Next Offered: Spring/Summer 2023

Electives – Group B (select 3)

[CMUS 201 Introduction to Classical Music](#)

Next Offered: Fall 2022

[CMUS 303 Global Guitar](#)

[CMUS 503 Social Issues in Popular Music](#)

Next Offered: Winter 2023

[CMUS 505 The History of Pop Music](#)

Next Offered: Spring/Summer 2022

[CRTA 180 Music and Film](#)

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Next Offered:Spring/Summer 2022

[CRTA 183 Rhythm, Beat and Groove](#)

[CRTA 530 Chinese Music](#)

Recommended Course Sequence	+
Admission Criteria	—
<div>Recommended:</div> <div><ul style="list-style-type: none">Ontario Secondary School Diploma (OSSD) or equivalent<ul style="list-style-type: none">With 6 Grade 12 U or M credits, including EnglishWith a minimum grade of 70 percent</div> <div>OR</div> <div><ul style="list-style-type: none">Mature student status with relevant work experience</div>	
Awards and Financial Aid	+
Contact Us	+

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News Studies



The Certificate in News Studies will not be accepting any new registrants. This certificate has been discontinued effective Fall 2021, and the courses related to this certificate will no longer be offered.

For more information, please contact ce@ryerson.ca.

Explore Our Related Certificates

Take this opportunity to pursue a new direction! If you'd like to continue learning with us, we have other related certificates and courses available for you to discover. Check out these options:

- Deliver effective, persuasive information and keep your organization in the know through our [Certificate in Business Communication](#)
- Become a crisis management pro and business reputation defender with our [Certificate in Public Relations](#)

Register now ➤

Required Course

[CNNS 101 Introduction to News Studies](#)

Electives (select 5)

- [CNNS 102 Understanding Multimedia Journalism](#)
- [CNNS 344 Making a Difference: How Journalism Matters](#)
- [CNNS 401 History of Journalism](#)
- [CNNS 404 Journalism's Best](#)
- [CNNS 410 Queer Media](#)
- [CNNS 412 Documentary Survey](#)
- [CNNS 419 Journalism in Comedy](#)
- [CNNS 500 Journalism and the Arts](#)
- [CNNS 502 Follow the Money: Business Journalism](#)
- [CNNS 505 Health and Science Journalism](#)
- [CNNS 512 Reporting Sports](#)

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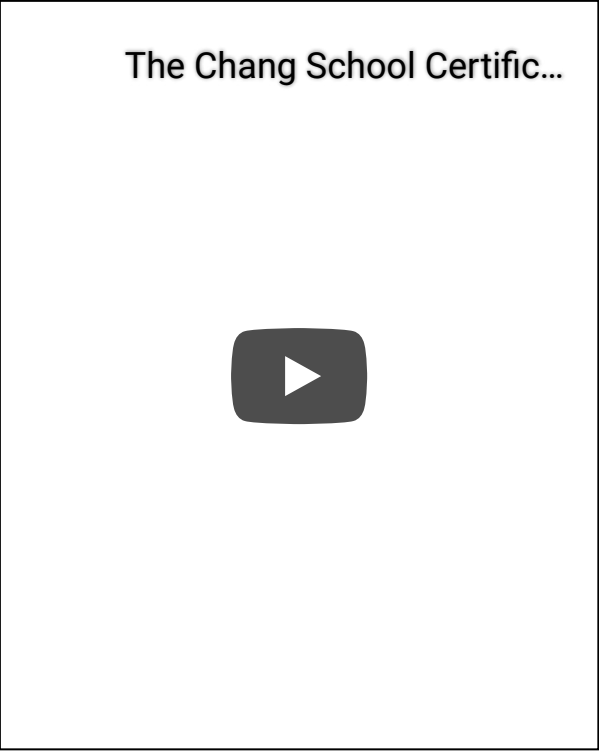
Nonprofit and Voluntary Sector Management

Certificate

FULLY ONLINE

The nonprofit and voluntary sector is an exciting and dynamic force enacting positive change in Canada’s quality of life. Nonprofits and charities engage residents and develop communities, providing programs and services, and contributing to an ongoing wave of change and innovation for the greater good. The Certificate in Nonprofit and Voluntary Sector Management will equip you with a comprehensive and practical understanding of the key areas of the sector and ways to navigate this ever-changing field. Whether you are interested in beginning a career in nonprofit and voluntary organizations or you are transitioning from another sector, our dynamic and interdisciplinary program offers opportunities at all levels of this diverse and fast-growing sector.

[Get Connected](#)



Industry and Careers

The opportunities offered by the nonprofit and voluntary sector are wide and diverse, from larger scale operations like the International Red Cross to local nonprofits working with youth in their communities. Graduates of the certificate may find career opportunities in local, national, and international nonprofits, charitable organizations, government, and more.

This certificate can lead to career paths in the following specializations:

- Adminstration
- Advocacy and government relations
- Communications
- Leadership and management
- Marketing and fund development
- Program development and delivery
- Research and policy
- Volunteer management

Who Should Take This Certificate?

- Experienced workers in the nonprofit sector who seek to deepen and broaden their knowledge and learn specific skills they haven’t learned on the job – for example, leadership or management
- Individuals who are interested in transitioning into the charitable sector from the business or public sector

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Required Courses

You may only select one of CINF 902 or CINF 915.

[CINF 900 Understanding the Nonprofit Sector](#)

Next Offered:Fall 2022

[CINF 901 Effective Nonprofit Organizations](#)

Next Offered:Fall 2022

[CINF 902 Evaluation for Nonprofits](#)

Next Offered:Fall 2022

[CINF 915 Financial Management for Nonprofits](#)

Next Offered:Winter 2023

[CINF 920 Critical Issues in the Nonprofit Sector](#)

Next Offered:Winter 2023

Electives (select 4 not previously taken in Required Courses)

[CINF 902 Evaluation for Nonprofits](#)

Next Offered:Fall 2022

[CINF 910 Strategic Planning for Nonprofits](#)

Next Offered:Winter 2023

[CINF 911 Advocacy and Gov't Relations: Nonprofits](#)

Next Offered:Fall 2022

[CINF 912 Marketing for Nonprofits](#)

Next Offered:Winter 2023

[CINF 913 Leadership in Nonprofits](#)

Next Offered:Fall 2022

[CINF 914 Diversity in Nonprofits](#)

Next Offered:Fall 2022

[CINF 915 Financial Management for Nonprofits](#)

Next Offered:Winter 2023

[CINF 916 Nonprofits on the](#)

- Undergraduate students who are interested in completing degree-credit courses or a minor in the nonprofit sector
- Individuals who are interested in developing relationships and partnerships with nonprofit organizations from a base in the public, institutional, or private sectors.

What Will You Learn?

The program's interdisciplinary curriculum pools knowledge from Ryerson University's Faculty of Arts and the Ted Rogers School of Management. Customize your learning with courses that offer an engaging blend of theory and practice. After completing this certificate, you will be well versed in key areas of nonprofit and voluntary sector management:

- Leadership
- Marketing
- Financial management
- Strategic planning
- Evaluation
- Organizational management and change
- Diversity
- Issues in the sector
- International NGOs

Certificate Requirements



- 4 required courses
- 4 electives
- Cumulative grade point average (GPA) of 1.67+

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Note: All courses in the certificate are undergraduate level credit courses.

All courses in this certificate are offered online and in class.

Admission Criteria



Recommended:

- Ontario Secondary School Diploma (OSSD) or equivalent
 - With 6 Grade 12 U or M credits

OR

- Mature student status

Awards and Financial Aid



Frequently Asked Questions



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Nursing and Interprofessional Healthcare Leadership and Management

Certificate

NEW FOR FALL 2020

FULLY ONLINE

Looking to leverage your experience as a healthcare professional into a higher powered position? In a rapidly changing landscape in the wake of the COVID-19 pandemic, leadership and management positions can offer new opportunities to those working in the healthcare sector. From social services to public health, all levels of the healthcare field are in need of leaders and innovators to effect change — and this could be you. With a unique specialization for registered nurses and other healthcare professionals, this fully online certificate combines practical and professional knowledge to help you transition smoothly into leadership and management roles.



[Get Connected](#)

Industry and Careers

Designed specifically for healthcare professionals and Registered Nurses, this certificate will not only enhance your existing skill set but upgrade your credentials to help put you on a track to leadership roles across hospitals, long-term care facilities, and social services.

Set yourself apart with your knowledge of management theories across all levels of organization:

- Education, public health, community support, poverty alleviation, patient outcomes, and a firm understanding of healthcare systems

Who Should Take This Certificate?

- Members of a regulated health discipline with a minimum of an undergraduate degree
- Registered Nurses (RNs)
- Undergraduate students with a degree in health services management

What Will You Learn?

Customize your learning experience to match your professional goals and choose from a range of electives, from community conflict resolution skills to computer management. Utilizing the LEADS framework, students will apply core components of nursing leadership and management. With best practice guidelines for Developing and Sustaining Nursing Leadership by the Registered Nurses' Association of Ontario (RNAO), students will:

Lead self

Required

[CVNU 360 Advanced Leadership and Management](#)

Next Offered: Fall 2022

[CVNU 370 Change and Innovation](#)

Next Offered: Winter 2023

Electives (select 2)

Other electives may be selected with consultation and permission of the Academic Lead. e.g. CMHR 850: Coaching, Facilitation, and Internal Consulting; other Human Resources courses such as Recruitment and Selection, Training and development, Compensation, HR Planning, Occupational Health and Safety, Union Relations or other newly developed courses.

[CINT 900 Program Planning and Evaluation Strategies](#)

Next Offered: Fall 2022

[CTEC 210 Fundamentals of Project Management](#)

Next Offered: Fall 2022

[CHSM 301 The Healthcare Systems](#)

Next Offered: Fall 2022

[CHSM 307 Principles of Long Term Care Service Del.](#)

Next Offered: Winter 2023

[CINT 901 Gerontology: Critical Issues and Future Trends](#)

Next Offered: Fall 2022

[CINT 904 Health Promotion and Community Development](#)

Next Offered: Fall 2022

[CINT 905 Conflict Resolution in Community Services](#)

Next Offered: Spring/Summer 2022

[CINT 907 Team Work for Community Services](#)

Next Offered: Fall 2022

- Engage others
- Achieve results
- Develop coalitions
- Systems transformation

Learning in action: Kimberly, a Chang School student and RN, [put theory into real-life practice](#) in her workplace through concepts and projects taken in the program.

[CVIN 150 Advancing the Patient Experience](#)

[CVNU 322 Computer and Information Management in Nursing](#)

Next Offered:Fall 2022

[CVNU 325 Nursing Informatics and Patient Safety](#)

Certificate Requirements	—
<div><ul style="list-style-type: none">Two required coursesTwo electives*Cumulative grade point average (GPA) of 1.67+<p>*Electives are divided into two groups, allowing you to focus on specialized skills. Select courses from program planning and evaluation and/or leadership and management electives.</p><p>To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our Glossary of Terms ↗.</p><p>If the certificate requirements change and courses are no longer available, you may request Course Substitutions/Directives. You must apply to graduate on my.ryerson ↗ (RAMSS) within the appropriate application deadlines (refer to Important Dates ↗). Visit Graduation ↗ for details.</p></div>	
Admission Criteria	—
<div><p>To qualify for registration into the certificate, you must meet one of the following criteria:</p><ul style="list-style-type: none">be a member of a regulated health discipline with a minimum of an undergraduate degreeundergraduate (or equivalent) degree in health services managementregistered practical nurse (RPN) license (recommended completion of two prior undergraduate courses with a C and written assignments)<p>Admission Application</p><p>Students who may need to refresh their baccalaureate leadership and management foundational knowledge and skills may be advised to consider taking one of the following prior to registering in the certificate program:</p><p>CNUR 831 - Leadership Development for Practice ↗ (for baccalaureate RNs only)</p><p>CHSM 306 - Management Leadership and Decision-Making ↗</p><p>CKPM 211 - Leadership in Project Management ↗</p><p>CMHR 405 - Organizational Behaviour and Interpersonal Skills ↗</p></div>	
Awards and Financial Aid	+
Frequently Asked Questions	+
Contact Us	+

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Occupational Health and Safety

Certificate

FULLY ONLINE

Get “recession-proof” skills for jobs in industries like construction, manufacturing, and healthcare with our Certificate in Occupational Health and Safety. Now more than ever, employers need skilled professionals to ensure their workplaces are safe and healthy. Our certificate will help you become an expert in developing, implementing, managing, and evaluating health and safety programs.

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Industry and Careers

This certificate can support your career growth in a range of industries like hospitals/healthcare providers, mining, forestry, construction, transportation and more.

This certificate can lead to a career in roles such as:

- Health and Safety Assistant
- OHS Administrator
- OHS Coordinator
- Health and Safety Officer

Who Should Take This Certificate?

- Individuals who need to fulfill an occupational health and safety (OHS) function as part of your current role
- Individuals looking for a new job/skills that are always in demand
- Occupational health and safety professionals who are looking for career advancement and to meet the Canadian Registered Safety Professional requirements.

What Will You Learn?

After completing this certificate, you will able to:

- Navigate OHS legislation
- Complete OHS management reports
- Analyze occupational hygiene assessments
- Conduct hazard recognition and assessment, and provide solutions for controls
- Meets the educational requirements to write the Canadian Registered Safety Technician exam
- Meets the requirements to write the Canadian Registered Safety Professional exam

After completing this certificate, you must continue on to our two other health and safety certificates – [Advanced Safety Management](#) and [Occupational Health and Safety Leadership](#) – to satisfy the educational requirements to take the Canadian

[Register now](#)

Required Courses

[CCMN 114 Short Management Reports](#)

Next Offered:Fall 2022

[CMHR 405 Organizational Behaviour](#)

[COHS 208 Occupational Health and Safety Law](#)

Next Offered:Fall 2022

[COHS 314 Physical Agents](#)

Next Offered:Fall 2022

[COHS 508 Occupational Health and Safety](#)

Next Offered:Spring/Summer 2022

[COHS 608 Hazard Recognition and Control](#)

Next Offered:Fall 2022

[COHS 811 OHSE Management Systems](#)

Next Offered:Fall 2022

Electives (select 1)

[CINT 904 Health Promotion and Community Development](#)

Next Offered:Fall 2022

[CPPA 101 Cdn Public Administration I: Institutions](#)

Next Offered:Fall 2022

Registered Safety Professional (CRSP) Board exam.

Certificate Requirements	—
<div><div><div><div><div></div><div>7 required courses</div></div><div><div></div><div>1 elective</div></div><div><div></div><div>Cumulative grade point average (GPA) of 1.67+</div></div></div></div><p>To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our Glossary of Terms. If certificate requirements change and courses are no longer available, you may request Course Substitutions/Directives. You must apply to graduate on my.ryerson (RAMSS) within the appropriate application deadlines (refer to Important Dates). Visit Graduation for details.</p></div>	
Admission Criteria	—
<div><div><div><div><div></div><div>Recommended:</div></div><div><div><div><div></div><div>Ontario Secondary School Diploma (OSSD) or equivalent</div></div><div><div></div><div>With six Grade 12 U or M credits</div></div></div></div><div><div>OR</div><div><div><div></div><div>Mature student status</div></div></div></div><p>If you are an undergraduate student, you should be aware of possible certificate restrictions. Check Curriculum Advising ↗ for complete details.</p></div></div></div>	
Awards and Financial Aid	+
Frequently Asked Questions	+
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Occupational Health and Safety Leadership

Certificate

Register now

FULLY ONLINE

Prepare yourself for leadership roles, responsibilities, and management in the field of occupational health and safety (OHS). Learn from industry experts to enhance your OHS knowledge and learn to lead from a management perspective. The courses in this program focus on project management, leadership, ethics, and ability management to prepare you to become an OHS leader.

By completing this program after the [Certificate in Occupational Health and Safety](#) and the [Certificate in Advanced Safety Management](#), you will be prepared to successfully complete the Board of Canadian Registered Safety Professionals (BCRSP) exam to become a Canadian Registered Safety Professional (CRSP). This is one of the few certificate programs in Ontario that meets CRSP educational requirements.

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Required Courses

[COHS 477 Disability Management](#)

Next Offered: Winter 2023

[COHS 840 OHS Leadership and Ethics](#)

Next Offered: Fall 2022

[CTEC 210 Fundamentals of Project Management](#)

Next Offered: Fall 2022

Elective (select 1)

[CINT 960 Leadership Framework for Community](#)

Next Offered: Fall 2022

[CMHR 640 Leadership](#)

Industry and Careers

This certificate can lead to career paths in roles such as:

- Compliance officer
- Disability management professional
- OHS director
- OHS manager
- OHS officer
- Risk manager
- Vice president, health and safety

According to the Board of Canadian Registered Safety Professionals (BCRSP), becoming a Canadian Registered Safety Professional (CRSP) can help you:

- increase your earning potential
- enhance your employability and mobility
- enhance your professional credibility

Who Should Take This Certificate?

This program is for individuals who have completed the [Certificate in Occupational Health and Safety](#) and/or the [Certificate in Advanced Safety Management](#) and want to take their OHS career to the next level

your career to the next level.

If your goal is to work as a leader in the OHS field, or if you’re already working in a leadership position and want to formalize your education and build on your skills, this certificate is for you.

What Will You Learn?

After completing this certificate, you will be able to:

- lead best practice in OHS planning and management
- address integrated disability management
- navigate government legislation and regulations
- implement fundamentals of project management
- apply OHS business perspectives
- understand ethical leadership
- interpret OHS return on investment, cost, and savings

Courses are drawn from Ryerson University’s Bachelor of Applied Science in Occupational and Public Health (BASc). Courses completed as part of this certificate may be recognized towards the completion of the BASc. Offered through the School of Occupational and Public Health, the BASc is the only degree-level program of its kind in Canada.

Certificate Requirements	—
<div><ul style="list-style-type: none">• 3 required courses• 1 elective• Cumulative grade point average (GPA) of 1.67+<p>To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our Glossary of Terms. If certificate requirements change and courses are no longer available, you may request Course Substitutions/Directives. You must apply to graduate on my.ryerson (RAMSS) within the appropriate application deadlines (refer to Important Dates). Visit Graduation for details.</p></div>	
Admission Criteria	—
<div><p>Required:</p><ul style="list-style-type: none">• Certificate in Occupational Health and Safety<p>OR</p><ul style="list-style-type: none">• Certificate in Advanced Safety Management<p>OR</p><ul style="list-style-type: none">• Equivalent<p>If you are an undergraduate student, you should be aware of possible certificate restrictions. Check Curriculum Advising ↗ for complete details.</p></div>	
Professional Designations and Accreditation	+
Awards and Financial Aid	+
Frequently Asked Questions	+
Contact Us	+

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Photography Studies

Certificate

Register now

Photography is an important medium of communication in industry, sales and advertising, government, education, media, and the arts. The demand for properly trained and qualified photographers continues to grow. The rise of digital photography technology has lowered traditional barriers to entry, creating new business opportunities for entrepreneurs. Our Certificate in Photography Studies can help you make a career change, establish your own photography business, improve your chances for jobs in photography-related fields, or prepare you to apply for a degree program in photography.

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Achievers at The Chang S...



This certificate will help you advance or change your career while developing the technical knowledge and skills to provide hands-on innovation through robotics and embedded systems products and devices.

Industry and Careers

Photography is an important medium of communication in:

- Arts
- Education
- Industry
- Media
- Sales and advertising
- Government

Use this program to:

- Build your professional portfolio
- Gain the technical foundation to start your own business in photography for:
 - Architecture
 - Commercial products
 - Contemporary photographic art
 - Fashion
 - Human figure
 - Photojournalism
 - Portrait
 - Weddings

Who Should Take This Certificate?

- Professional photographers looking to build their skill sets to Improve job chances in photography-related fields and upgrade their current level of photography expertise

Required Courses

[CDFP 328 Photography Production I](#)

Next Offered:Fall 2022

[CDFP 329 Photography Production II](#)

Next Offered:Spring/Summer 2022

[CDFP 391 History of Photography I](#)

Next Offered:Fall 2022

Electives: 39-Hour Courses (select 5)

2 19.5-hour courses may be completed as the equivalent of 1 39-hour course.

[CDFP 320 Analog Photography](#)

[CDFP 322 Photography for Ad Agencies](#)

[CDFP 332 Digital Printing](#)

[CDFP 333 Photography and Digital Imaging](#)

Next Offered:Winter 2023

[CDFP 353 From Still to Motion](#)

[CDFP 358 Photography and the Screen](#)

[CDFP 367 Photoshop for Photographers](#)

Next Offered:Spring/Summer 2023

[CDFP 378 20th Century Photography](#)

[CDFP 381 Advanced Fashion Photography](#)

[CDFP 382 Advanced Portrait Photography](#)

Next Offered:Spring/Summer 2022

[CDFP 389 Studio Lighting I](#)

Next Offered:Spring/Summer 2022

[CDFP 390 Studio Lighting II](#)

[CDFP 392 Documentary Photography](#)

Next Offered:Spring/Summer 2023

- Individuals looking to retrain or make a career change into photography
- Individuals preparing for a photography degree program at an advanced level

You can enrol in individual courses to gain specific skills, or take the whole certificate program to develop a greater depth of photography knowledge.

What Will You Learn?

- Learn about the technical side of photography including:
 - Bookmaking
 - Business skills for photographers
 - Digital printing workshopLarge format
 - Human figure
 - Photoshop techniques
 - Silver-based printing
- Focus on photography production and create a number of portfolios to change or advance your career
- Explore specialties including fashion, portrait, wedding, editorial, and more

Certificate Requirements

- 3 required courses
- 5 39-hour electives
 - 2 19.5-hour courses are considered equivalent to 1 39-hour course
- Cumulative grade point average (GPA) of 1.67+

You must complete the certificate within five years of registering in the Certificate in Photography Studies program.

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria

Recommended:

- Ontario Secondary School Diploma (OSSD) or equivalent
 - With 6 Grade 12 U or M credits (including English)
 - With a minimum average of 60 percent

OR

- Mature student status with professional experience

If you are an undergraduate student, you should be aware of possible certificate restrictions. Check [Curriculum Advising](#) [↗](#) for complete details.

Awards and Financial Aid

Frequently Asked Questions

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[CDFP 398 History of Photography II](#)

[CDFP 403 Creative Wedding Photography](#)

[CDFP 404 Magazine/Editorial Photography](#)

[CDFP 405 Architectural Photography](#)

[CDFP 415 Studio Lighting III](#)

[CDFP 905 Contemporary Photographic Art](#)

Next Offered:Winter 2023

[CDFP 918 Photojournalism](#)

[CFPN 532 Advanced Studio Lighting](#)

[CFPN 536 Media Business Practices](#)

Next Offered:Winter 2023

[CFPN 539 The Human Figure](#)

Electives: 19.5-Hour Courses

2 19.5-hour courses may be completed as the equivalent of 1 39-hour course.

[CDFP 312 Art Direction for Ad Agencies](#)

[CDFP 414 Traditional Photography](#)

[CDFP 432 Digital Printing Workshop](#)

[CDFP 907 Using a 4X5 View Camera](#)

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Practical Data Science and Machine Learning

Certificate

Register now

FULLY ONLINE

Our world is driven by data. Professionals with skills in practical data science and machine learning are a highly valuable asset, in demand to help organizations solve business problems, make better evidence-based decisions, and predict the latest trends. Our fully online certificate program will teach you how to program queries in Python, and how to use machine learning and artificial intelligence (AI) platforms to implement the most up-to-date technical and analytic approaches, applications, big data tools, and software for querying data. Become the data storyteller employers are looking for!



Get Connected

Required

[CIND 719 Big Data Analytics Tools](#)

Next Offered: Fall 2022

[CIND 840 Practical Approaches in Machine Learning](#)

Next Offered: Fall 2022

[CIND 850 Practical Deep Learning](#)

Next Offered: Fall 2022

[CIND 860 Advanced Data Analytics Project](#)

Next Offered: Winter 2023

This four-course Certificate in Practical Data Science and Machine Learning builds on the quantitative background from the Certificate in Data Analytics, Big Data and Predictive Analytics or previous industry experience (or equivalent).

Industry and Careers

Professionals with highly developed skills in data science and machine learning are in demand. This certificate can lead to career paths in various roles. Here are some examples:

This certificate can lead to career paths in various fields. Here are some examples:

- Automation director
- Big data analyst
- Big data consultant
- Big data engineer
- Chief data officer
- Chief productivity officer
- Data analyst
- Data scientist
- Human-computer interaction (AI) expert
- Human-technology integration specialist
- Operations developer (DevOps)
- Operations manager

Who Should Take This Certificate?

- Professionals with experience in Python, machine learning, and predictive analytics

who want to expand their expertise

- Individuals who have already taken our Certificate in Data Analytics, Big Data and Predictive Analytics and want to learn the essential components that are intrinsic to practical data science and machine learning

What Will You Learn?

After completing this certificate, you will be able to do the following:

- Construct big data analytics algorithms and use machine learning algorithms to solve real-world problems
- Use the Linux file system effectively (Bash commands, regular expressions), work with the Hadoop platform, write complex queries on big data using Apache Hive, and write scripts and analyze data using Apache Spark
- Use relevant and visualization R packages or Python libraries to address a problem
- Build and design predictive models to represent domains under study, and build ensemble learning models to aim for higher accuracy
- Differentiate between supervised and unsupervised machine learning algorithms based on research questions
- Apply, train, and evaluate different deep learning models based on specific tasks
- Replicate state-of-the-art studies and highlight the similarities and differences between the actual and replicated work in terms of applied datasets, approaches, tools, and outcomes

Certificate Requirements

- Four required courses
- Cumulative grade point average (GPA) of 1.67+

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria

Recommended:

Hold The Chang School's [Data Analytics, Big Data, and Predictive Analytics](#) certificate or equivalent.

OR

Mature student status and other relevant qualifications or relevant industry experience (to be determined by the Program Director).

If you are an undergraduate student, you should be aware of possible restrictions. Check [Curriculum Advising](#) for complete details.

Professional Designations and Accreditation	+
Awards and Financial Aid	+
Frequently Asked Questions	+
Contact Us	+



Privacy, Access, and Information Management

Certificate

Register now

In today’s rapidly evolving digital economy, individual privacy and the security of personal information have never been more important. High-profile breaches, heightened surveillance, increased access to data – these all present new and serious challenges for organizations and contribute to an increased demand for skilled privacy professionals. Our Certificate in Privacy, Access, and Information Management prepares you to address the complexity of these issues. This certificate will help you acquire the knowledge and expertise needed to gain employment in this in-demand career specialization.

Hot Careers Spotlight: The...



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Industry and Careers

This certificate can lead to career paths in roles such as:

- Privacy officer
- Privacy analyst
- Information and records management specialist
- Data and trust officer
- Information privacy technologist
- Freedom of information coordinator
- Privacy and compliance manager
- Access to information analyst

Who Should Take This Certificate?

- Recent degree graduates looking for an in-demand career specialization.
- Working professionals who want to pivot into a privacy-based role within an existing organization or change careers and go into privacy, but do not have the qualifications.
- Professionals who have recently been hired to work on privacy and access issues and who need training.

What Will You Learn?

In this certificate program, you will learn how to:

- Leverage technology as the driving force for future policy issues
- Plan and schedule the project in a group setting using the critical path method (CPM)
- Identify, plan, and manage project risk and quality using analytical tools and methods

Required Courses

[CLAW 401 Information Access and Privacy Protection](#)

Next Offered: Fall 2022

[CZIT 427 Data and Info. Mgmt for Privacy](#)

Next Offered: Winter 2023

[CZLW 327 Privacy By Design](#)

Next Offered: Fall 2022

[CZLW 527 Applying Privacy and Access](#)

Next Offered: Winter 2023

Electives (select 2)

[CDPR 100 Public Relations Principles](#)

[CHIM 305 Introduction to Health Informatics](#)

Next Offered: Fall 2022

[CITM 301 IT Infrastructure](#)

Next Offered: Fall 2022

[CITM 820 Information Systems Security and Privacy](#)

Next Offered: Fall 2022

[CLAW 122 Business Law](#)

Next Offered: Fall 2022

[CLAW 402 Health Information Access and Privacy](#)

Next Offered: Winter 2023

[CMHR 405 Organizational Behaviour](#)

[CMHR 650 Management of Change](#)

[CPPA 403 e-Government](#)

- Implement financial controls to accounting, budgeting, and cost management systems
- Organize self-managing teams to build products in agile and mobile project environments

Certificate Requirements



- 4 required courses
- 2 electives
- Cumulative grade point average (GPA) of 1.67+

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria




Recommended:

- Ontario Secondary School Diploma (OSSD) or equivalent
 - With 6 Grade 12 U or M credits (including English)
 - With a minimum average of 60 percent

OR

- Mature student status

If you are an undergraduate student, you should be aware of possible certificate restrictions. Check [Curriculum Advising](#)  for complete details.

Awards and Financial Aid



Frequently Asked Questions



Contact Us



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Proficiency in French

Certificate

FULLY ONLINE

French language skills can lead to success in business or as part of a university degree. Hiring bilingual employees is advantageous for businesses for a number of reasons, including being able to meet an increasing demand for a multilingual workforce, reaching international markets easier, offering more holistic customer service, and fostering a more diverse environment. Whether you want to learn French for personal or business reasons, this certificate will help you build the speaking and writing skills that meet your goals and add an in-demand skill to your resume.



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Industry and Careers

Knowledge of French can widen your career opportunities in fields where bilingualism may be required or desired.

French language skills can lead to success in business or as part of a university degree. Having a second language can help you get a job interview, offer of employment, promotion or even a pay rise, in addition to having the required skills for the role and being a fit for the organization you're applying to.

Who Should Take This Certificate?

Individuals and professionals that want to become proficient in spoken and written French

What Will You Learn?

In this certificate program, you will learn:

- French grammar and vocabulary, from beginner to advanced level
- French cultural readings and short fictional texts
- A communicative approach, with an emphasis on oral proficiency and on reading, writing, and understanding French

Certificate Requirements

- 6 courses*
- Cumulative grade point average (GPA) 1.67+

*If you enter the certificate at a proficiency level below CFRE 501, you must successfully complete 6 courses. However, If granted advanced placement (through the placement assessment), you only need to complete 4 advanced level courses

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Lower and Intermediate Level Courses

[CFRE 201 Introductory French II](#)

Next Offered:Spring/Summer 2022

[CFRE 301 Intermediate French I](#)

Next Offered:Spring/Summer 2022

[CFRE 401 Intermediate French II](#)

Next Offered:Spring/Summer 2022

[CFRE 402 French Conversation and Pronunciation](#)

Next Offered:Spring/Summer 2022

Advanced Level Courses

[CFRE 501 Speaking and Writing French I](#)

Next Offered:Fall 2022

[CFRE 502 Communication and Business French](#)

[CFRE 505 French Language and Culture](#)

[CFRE 507 English-French Translation I](#)

[CFRE 508 Intro to 20th C French Literature I](#)

[CFRE 509 Franco-Canadian Literature I](#)

[CFRE 510 Effective Writing](#)

[CFRE 515 Introduction to Business French](#)

[CFRE 601 Speaking and Writing French II](#)

Next Offered:Spring/Summer 2022

[CFRE 602 Business French in Practice](#)

[CFRE 605 Francophone Language and Culture](#)

[CFRE 607 English-French Translation II](#)

[CFRE 608 Intro to 20th C French Literature II](#)

[CFRE 609 Franco-Canadian Literature II](#)

(CFRE 501 or higher) to fulfill the certificate requirements.

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria	—
<p>Recommended:</p> <ul style="list-style-type: none">Successful completion of Introductory French I (CFRE 101)<ul style="list-style-type: none">With a minimum grade of C+ <p>OR</p> <ul style="list-style-type: none">Admission by placement assessment <p>If you are an undergraduate student, you should be aware of possible certificate restrictions. Check Curriculum Advising ↗ for complete details.</p>	
Placement Assessment	+
Awards and Financial Aid	+
Contact Us	+

[CFRE 610 Cultural Context of Writing](#)

[CFRE 701 French for Today](#)

[CFRE 704 Intro to Franco-Canadian Culture I](#)

[CFRE 706 The Life and Times of the French Language](#)

[CFRE 707 Introduction to French-English Translation](#)

[CFRE 801 French and New Media](#)

[CFRE 803 French Theatre: 20th C and Contemporary](#)

[CFRE 804 Intro to Franco-Canadian Culture II](#)

[CFRE 805 French Language Teaching Methodologies](#)

[CFRE 903 The Francophone Short Story](#)

[Ryerson University has changed its name. Find out more.](#)

Proficiency in Spanish

Certificate



Develop a wide range of Spanish language skills. Learn to converse and write in one of the world’s most widely spoken languages.

Spanish language skills can lead to success in business or as part of a university degree. Whether you want to learn Spanish for personal or business reasons, this certificate will give you the oral and written skills that meet your goals. Our program offers opportunities to increase professional qualifications, prepare for travel, and become a more informed citizen in a globalized world.

We offer five levels of language courses, along with a range of advanced and specialized courses. While colleges and other universities offer primarily conversational Spanish, our certificate provides relevant degree-credit courses in small-classroom settings.

Not ready to enrol but want to learn more?

Fill out this form and a representative from The Chang School will contact you.

Express interest

Register now

Required Courses

CSPN 201 Introductory Spanish II

Next Offered:Spring/Summer 2022

CSPN 301 Intermediate Spanish I

Next Offered:Fall 2022

CSPN 401 Intermediate Spanish II

Next Offered:Spring/Summer 2022

CSPN 501 Advanced Spanish I

Next Offered:Fall 2022

CSPN 601 Advanced Spanish II

Next Offered:Winter 2023

Electives (select 1)

CSPN 402 Spanish Conversation and Pronunciation

CSPN 510 Spanish for Native Speakers

CSPN 515 Introduction to Business Spanish

CSPN 610 Spanish Composition for Native Speakers

CSPN 702 Communication in Business Spanish

CSPN 704 Latin American Culture I

CSPN 705 The Boom in Latin American Literature

CSPN 707 Spanish-English Translation

CSPN 708 Contemporary Spanish Fiction

CSPN 710 History of the Spanish Language

CSPN 804 Latin American Culture II

CSPN 810 Cultural Context of Writing

What Will You Learn?

Who Should Take This Certificate?

Who Teaches the Courses?

Industry and Careers

Testimonials

Certificate Requirements

- 5 required courses*
- 1 elective
- Cumulative grade point average (GPA) 1.67+

*You may be exempted from completing the required courses if you completed 4 courses at a higher level than CSPN 401. If granted advanced placement (through the placement and assessment interview with the academic coordinator), you only need to complete 4 advanced level courses (CSPN 402 or higher) to fulfill the certificate requirements.

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria

Recommended:

- Successful completion of Introductory Spanish I ([CSPN 101](#))
 - With a minimum grade of C+

OR

- Admission by placement assessment and interview

If you are an undergraduate student, you should be aware of possible certificate restrictions. Check [Curriculum Advising](#) [↗](#) for complete details.

Awards and Financial Aid

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Project Management

Certificate

FULLY ONLINE

Become a successful project manager.

Project management is a crucial role that ensures projects go according to plan, guiding and overseeing teammates through a project, managing changes and risks to help keep the project on task. You can use our project management courses to meet PMI's educational requirements and prepare for the Certified Associate in Project Management (CAPM)® and Project Management Professional (PMP)® certifications.

Get Connected

5 Tips for Managing Proje...



Register now

Required Introductory Course (select 1)

If you plan to pursue the ITM degree, you should take CITM 750 (as CTEC 210 cannot be used towards the ITM degree).

[CITM 750 IS Project Management](#)

Next Offered:Spring/Summer 2022

[CTEC 210 Fundamentals of Project Management](#)

Next Offered:Fall 2022

Required Core Courses

[CKPM 203 Planning and Scheduling](#)

Next Offered:Fall 2022

[CKPM 209 Project Risk and Quality Management](#)

Next Offered:Fall 2022

[CKPM 211 Leadership in Project Management](#)

Next Offered:Fall 2022

[CKPM 212 Project Cost and Procurement Management](#)

Next Offered:Fall 2022

Industry and Careers

- Finance
- Technology/IT/Software
- Energy
- Manufacturing
- Construction
- Education
- Government/Not-for-profit
- Healthcare

Who Should Take This Certificate?

- Working professionals who want to transition into project management
- Professionals working in project management who are interested in writing the exam for PMI's Certified Associate in Project Management (CAPM)® or Project Management Professional (PMP)® credential
- Recent degree graduates who want to be more competitive in the marketplace as a new graduate

What Will You Learn?

After completing this certificate, you will be able to:

- Recognize the concepts and basic functions of the project management body of knowledge
- Plan and schedule the project in a group setting using the critical path method (CPM)
- Identify, plan, and manage project risk and quality using analytical tools and methods
- Implement financial controls to accounting, budgeting, and cost management systems

Project Management Stream (select 3)

Complete 3 the following courses to achieve the Project Management Stream.

[CCMN 114 Short Management Reports](#)

Next Offered:Fall 2022

[CHSM 308 Project Management - Long Term Care](#)

[CINT 905 Conflict Resolution in Community Services](#)

Next Offered:Spring/Summer 2022

[CKPM 217 Agile Project Management](#)

Next Offered:Fall 2022

[CMUP 405 Organizational](#)

- Organize self-managing teams to build products in agile and mobile project environments

Certificate Requirements

- 5 required courses
- selected stream*
- 1 39-hour elective†
 - 2 19.5-hour courses are considered equivalent to 1 39-hour course
- Cumulative grade point average (GPA) of 1.67+

*This certificate offers streams in Project Management; Architecture, Engineering, and Construction; Business and Information Management; and Community and Health Services Management. You must fulfil the requirements of one of these four areas as listed.

†The elective category only applies to the Architecture, Engineering, and Construction; Business and Information Management; and Community and Health Services Management streams. If you are in the Project Management Stream, you do not need to complete this category.

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria

Recommended:

- Ontario Secondary School Diploma (OSSD) or equivalent
 - With six Grade 12 U or M credits

OR

- Mature student status with relevant professional experience

Awards and Financial Aid

Frequently Asked Questions

Contact Us

[CMNR 405 Organizational Behaviour](#)

Architecture, Engineering, and Construction Stream

Complete the following courses to achieve the Architecture, Engineering, and Construction Stream. In addition to the courses below, select 1 course from the Elective category.

[CKPM 213 Management of Projects in the AEC](#)

Next Offered:Fall 2022

[CKPM 214 Project Development and Control](#)

Next Offered:Winter 2023

Business and Information Management Stream

Complete the following courses to achieve the Business and Information Management Stream. In addition to the courses below, select 1 course from the Elective category.

[CITM 305 Systems Analysis and Design](#)

Next Offered:Fall 2022

[CITM 410 Business Process Design](#)

Next Offered:Fall 2022

Community and Health Services Management Stream (select 2)

Complete 2 of the following courses to achieve the Community and Health Services Management Stream. In addition to the courses below, select 1 course from the Elective category.

[CHSM 301 The Healthcare Systems](#)

Next Offered:Fall 2022

[CHSM 305 The Management Cycle](#)

Next Offered:Fall 2022

[CHSM 307 Principles of Long Term Care Service Del.](#)

Next Offered:Winter 2023

Electives: 39-Hour Courses (select 1)

This category only applies to the Architecture, Engineering, and Construction; Business and Information Management; and Community and Health Services Management streams. If you are in the Project Management Stream, you do not need to complete this category. 2 19.5-hour courses may be completed as the equivalent of 1 39-hour course.

[CCMN 114 Short Management Reports](#)

Next Offered: Fall 2022

[CDCE 305 Intro to Intercultural Communication](#)

[CDCE 306 Managing Workplace Relationships](#)

[CDCE 307 Wking with Culturally Diverse Clients](#)

[CDCE 308 Cross Cultural Teamwork](#)

[CHSM 308 Project Management - Long Term Care](#)

[CINT 905 Conflict Resolution in Community Services](#)

Next Offered: Spring/Summer 2022

[CKPM 216 Project Management Internship](#)

Next Offered: Fall 2022

[CKPM 217 Agile Project Management](#)

Next Offered: Fall 2022

[CKPM 218 Enterprise Project Management](#)

[CKPM 219 Mobile Project Management](#)

[CKPM 220 Rescuing Failing Projects](#)

[CKPM 221 From Technical to Managerial](#)

[CKSS 210 Lean Six Sigma Contin Improvement](#)

Next Offered: Winter 2023

[CKSS 211 Lean Six Sigma Sust Bus Enterprise](#)

[CMHR 405 Organizational Behaviour](#)

Electives: 19.5-Hour Courses



This category only applies to the Architecture, Engineering, and Construction; Business and Information Management; and

Community and Health Services Management streams. If you are in the Project Management Stream, you do not need to complete this category. 2 19.5-hour courses may be completed as the equivalent of 1 39-hour course.

- [**CKPP 110 Overview of Program Management**](#)
- [**CKPP 120 Overview of Portfolio Management**](#)

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Project Management for Technical Professionals

Certificate



This certificate program will prepare professionals with technical backgrounds to become employed in middle-level management (MLM) positions in the field of project management.

It is aimed at engineers, information technology professionals, scientists, environmentalists, and other technical professionals.

The program focuses on the skills, knowledge, and tools you'll require to be a successful project manager.

☒ **Not ready to enrol but want to learn more?**

Fill out this form and a representative from The Chang School will contact you.

Express Interest

Register now

Required Course

[CTEC 210 Fundamentals of Project Management](#)

Next Offered: Fall 2022

Electives – Group A (select 3)

[CKPM 123 Strategic Project Mgt \(Tech Prof\)](#)

[CKPM 203 Planning and Scheduling](#)

Next Offered: Fall 2022

[CKPM 211 Leadership in Project Management](#)

Next Offered: Fall 2022

[CKPM 212 Project Cost and Procurement Management](#)

Next Offered: Fall 2022

[CKPM 216 Project Management Internship](#)

Next Offered: Fall 2022

[CKPM 217 Agile Project Management](#)

Next Offered: Fall 2022

[CKPM 220 Rescuing Failing Projects](#)

[CKPM 456 Enterprise Project Mgt \(Tech Prof\)](#)

Electives – Group B (select 2)

[CCMN 114 Short Management Reports](#)

Next Offered: Fall 2022

[CCMN 432 Communication in the Engineering Professions](#)

Next Offered: Fall 2022

[CDCE 400 Exploring Leadership Skills](#)

[CKSS 210 Lean Six Sigma Contin Improvement](#)

What Will You Learn?



Who Should Take This Certificate?



Industry and Careers



Certificate Requirements



- 1 required course
- 5 electives*
- Cumulative grade point average (GPA) of 1.67+

*Select 3 courses from Electives – Group A and 2 courses from Electives – Group B

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and

courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria

Required:

Internationally Educated Professionals

- An undergraduate degree and a minimum of two years of professional experience in a related field
- Be an accepted and registered participant in the Gateway for International Professionals' [Middle-level Managers \(MLM\) with Technical Background Bridging Program](#)
- Be a legal resident of Ontario at the time of application, and be eligible to work in Canada
- Have resided in Canada for no more than 10 years
- Be an internationally educated professional in a suitable technical discipline
- Demonstrate English language proficiency through any of Ryerson University's approved English language proficiency test scores

OR

All Other Applicants*

- Ontario Secondary School Diploma (OSSD) or equivalent
 - With 6 Grade 12 U or M credits

*If you do not have these requirements, you will be considered on an individual basis, taking into account your work-related experience and maturity.

Admission Application

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 mlm@ryerson.ca or 416-979-5000, ext. 2713.

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Next Offered:Winter 2023

[CKSS 211 Lean Six Sigma Sust Bus Enterprise](#)

[CMHR 405 Organizational Behaviour](#)

[CMHR 650 Management of Change](#)



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Psychology

Certificate

FULLY ONLINE

Dip your toe into the academic world of psychology without making a full commitment to an undergraduate program. In the Certificate in Psychology, you will acquire a strong foundation on which to pursue post-secondary studies. Plus our degree-credit courses can potentially be applied toward an undergraduate degree program.

Get Connected



Industry and Careers

This certificate can lead to career paths in various roles. Here are some examples:

- Child and youth worker
- Clinical coordinator
- Community worker
- Counsellor
- Gerontologist
- Healthcare administrator
- Psychologist
- Social worker
- Therapist

Who Should Take This Certificate?

- Students who would like to use the degree-credit courses toward an undergraduate degree in psychology
- Individuals who are looking for an academic introduction to the field of psychology

What Will You Learn?

You will learn the methods, concepts, theories, and applications of psychology. You will examine basic principles of psychology and how to apply them to everyday experiences, learn about statistical concepts, analyze research data, and work closely with a faculty member through an independent study to produce a comprehensive paper in a selected area.

Through your choice of electives, you can concentrate on a specific area. Here are some examples:

- Psychological principles of growth and development
- Abnormal aspects of human behaviour
- Explanations of personality and its development
- The study of social behaviour

Register now

Required Courses

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

[CPSY 102 Introduction to Psychology I](#)

Next Offered: Spring/Summer 2022

[CPSY 105 Perspectives in Psychology](#)

Next Offered: Fall 2022

[CPSY 202 Introduction to Psychology II](#)

Next Offered: Spring/Summer 2022

[CPSY 411 Research Methods and Statistics I](#)

Next Offered: Fall 2022

[CPSY 612 Independent Study](#)

Next Offered: Fall 2022

Electives (select 4)

[CPSY 214 Psychopharmacology](#)

[CPSY 215 Psychology of Addictions](#)

Next Offered: Spring/Summer 2022

[CPSY 300 Psychology and Law](#)

Next Offered: Spring/Summer 2022

[CPSY 302 Child Development](#)

Next Offered: Fall 2022

[CPSY 304 Psychology of Gender](#)

[CPSY 308 Psychology of Thinking](#)

Next Offered: Winter 2023

[CPSY 324 Biological Psychology](#)

Next Offered: Spring/Summer 2022

[CPSY 325 Psychological Disorders](#)

Next Offered: Fall 2022

[CPSY 335 Clinical Psychology](#)

Next Offered: Spring/Summer 2022

[CPSY 402 Adult Development](#)

Next Offered: Winter 2023

[CPSY 412 Human Brain Circuitry](#)

[CPSY 504 Social Psychology](#)

Next Offered: Fall 2022

[CPSY 505 Personality Theory](#)

The Study of Social Behaviour

- Applications of psychology in organizations

Certificate Requirements

- 4 required courses
- 4 electives
- Cumulative grade point average (GPA) of 1.67+

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria

Recommended:

- Ontario Secondary School Diploma (OSSD) or equivalent
 - With 6 Grade 12 U or M credits

OR

- 3 years of professional experience in business, community service, or industry

If you are an undergraduate student, you should be aware of possible certificate restrictions. Check [Curriculum Advising](#) [↗](#) for complete details.

Awards and Financial Aid

Contact Us

[CPSY 500 Personality Theory](#)

Next Offered:Spring/Summer 2022

[CPSY 518 Environmental Psychology](#)

[CPSY 602 Developmental Psychopathology](#)

Next Offered:Fall 2022

[CPSY 606 Abnormal Psychology](#)

Next Offered:Spring/Summer 2022

[CPSY 607 Drugs and Human Behaviour](#)

Next Offered:Fall 2022

[CPSY 614 Psychology of Sport](#)

Next Offered:Fall 2022

[CPSY 620 Psychology of Immigration](#)

[CPSY 621 Psychology of Human Sexuality](#)

Next Offered:Spring/Summer 2022

[CPSY 706 Personal Growth and Positive Psychology](#)

Next Offered:Fall 2022

[CPSY 707 Models of Stress and Adaptation](#)

Next Offered:Winter 2023

[CPSY 802 Death, Dying and Bereavement](#)

Next Offered:Winter 2023

[CPSY 805 Adjustment, Stress and Coping](#)

Next Offered:Fall 2022

[CPSY 806 Behaviour Modification](#)

[CPSY 807 Psychology of Prejudice](#)

[CPSY 808 Community Psychology](#)

Next Offered:Spring/Summer 2023

[CPSY 941 Cross Cultural Psychology](#)

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Public Administration and Leadership



Register now ▶

Governments need employees who know how societies and economies work and who care about delivering quality service and advice. They are also seeking people who are potential leaders and who will guide colleagues by their example and expertise. To meet this demand, The Chang School and Ryerson University’s [Department of Politics and Public Administration](#) have developed this certificate for individuals who already have a degree from a recognized university.

Get Connected ↗

Public Administration and ...



Industry and Careers

According to Statistics Canada, public sector employment comprises approximately 20 percent of total employment in Canada.

Here are a few possible career categories for graduates of this certificate:

- Community-based organizations that have administrative interactions with the federal, provincial, or municipal governments
- International governmental organizations (like the United Nations [UN], Organization for Economic Co-operation and Development [OECD], World Bank)
- Offices of an elected official (for example, as a political aide)
- Non-governmental organizations (NGO)
- Policy units of a federal, provincial, or municipal government department
- Private sector companies, particularly ones that have extensive interactions with domestic or foreign governments, or that are engaged in public research

Who Should Take This Certificate?

- Individuals who already have an undergraduate degree and wish to deepen their understanding of key aspects of public sector management and leadership
- Individuals looking to pursue graduate studies in public administration
- Individuals working in government or the nonprofit sector who want to build their skills to move up in their career

You can enrol in individual courses to gain specific skills, or take the whole certificate program to develop a greater depth of photography knowledge.

What Will You Learn?

In completing this certificate you will know how to:

- Recognize key issues in today’s rapidly evolving public sector
- Participate in the Canadian public policy-making process
- Interpret contemporary social, economic, and environmental policy
- Apply public sector leadership

Required Courses

[CPPA 211 Public Policy.](#)

Next Offered:Fall 2022

[CPPA 404 Issues in Public Administration](#)

Next Offered:Fall 2022

[CPPA 501 Public Sector Leadership](#)

Next Offered:Winter 2023

Electives (select 3)

[CPPA 301 Administrative Law](#)

Next Offered:Fall 2022

[CPPA 303 Financial Management](#)

Next Offered:Winter 2023

[CPPA 335 Theories of Bureaucracy.](#)

Next Offered:Fall 2022

[CPPA 401 Collaborative Governance](#)

[CPPA 402 Program Planning and Evaluation](#)

Next Offered:Winter 2023

[CPPA 403 e-Government](#)

[CPPA 411 Advanced Public Policy.](#)

Next Offered:Fall 2022

[CPPA 414 Comparative Public Policy](#)

Next Offered:Winter 2023

[CPPA 425 Intergovernmental Relations](#)

Next Offered:Fall 2022

[CPPA 490 Public Administration Themes](#)

- Apply public sector leadership

- Analyze the statutory and regulatory basis of Canadian public administration
- Rate and evaluate programs
- Work within budgetary processes
- Design effective accountability
- Rank the types of partnerships between government and other agents in the delivery of public goods
- Assess the quality of intergovernmental affairs
- Recognize and select the most appropriate instruments for policy and program delivery

Certificate Requirements

- 3 required courses
- 3 electives
- Cumulative grade point average (GPA) of 1.67+

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria

Required:

- An undergraduate degree

Note: If you have no background in politics or public administration and/or no experience in the public sector, you may be required to complete a preparatory course (usually either [CPPA 102](#) or [CPPA 120](#)) prior to admission in the certificate.

Admission Application

To apply for approval to register in the Certificate in Public Administration and Leadership, please complete and submit this online [program pre-approval form](#) [↗](#). Once you have completed and submitted this online form, a representative from The Chang School will contact you to provide next steps.

Note: You will also be required to submit academic transcripts to Dr. Patrice Dutil, Academic Coordinator. Instructions for submitting your transcripts are in the Education section of the pre-approval form.

If you are an undergraduate student, you should be aware of possible certificate restrictions. Check [Curriculum Advising](#) [↗](#) for complete details.

Awards and Financial Aid

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Public Relations

Certificate

FULLY ONLINE

The Chang School Certificate in Public Relations



If a challenging career consulting with professional businesses, community organizations, or government agencies sounds appealing, then public relations may be for you.

As a public relations practitioner, you will work with a variety of leaders and other professionals to:

- protect organizational reputation
- manage issues and crises
- conduct media relations
- develop internal and external communication programs
- develop and manage communication budgets
- resolve issues and challenges related to crisis communication and ethics
- 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), our fully online 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.

Online learning during the COVID-19 pandemic

We offer a full range of online courses for the Certificate in Public Relations, which provide high-quality, professional-level training. Our courses are developed and taught by industry professionals with the support of online learning specialists at The Chang School. (**Note:** Our online courses are not “virtualized” classroom courses.)

This program offers the following benefits:

- Enrol right away – open admissions with no application required

Register now

Required Courses

- [CDPR 100 Public Relations Principles](#)
- [CDPR 104 Planning Programming and Budgeting](#)
- [CDPR 105 Research and Program Evaluation](#)
- [CDPR 107 Public Relations Project](#)
- [CDPR 111 Writing for Public Relations](#)

Electives: 39-Hour Courses (select 3)

Two 19.5 hour courses may be completed as the equivalent of one 39 hour course.

- [CDPR 106 Media Relations](#)
- [CDPR 108 Social Media in Public Relations](#)
- [CDPR 113 Internal Communications Management](#)

Electives: 19.5-Hour Courses

2 19.5-hour courses may be completed as the equivalent of 1 39-hour course.

- [CDPR 103 Advanced PR Writing](#)
- [CDPR 110 Reputation Management](#)
- [CDPR 116 Public Relations Ethics](#)
- [CDPR 117 Crisis Communication](#)

- **Complete from wherever you are through a fully online format**
- **Take Ryerson degree-credit courses**
- **Prepare for recognition by leading professional associations**
- **Finish your certificate faster through our intensive schedule option**
- **Apply for merit-based awards**

What Will You Learn?	+
Who Should Take This Certificate?	+
Who Teaches the Courses?	+
Industry and Careers	+
Recommended Course Sequence	+
Certificate Requirements	—
<ul style="list-style-type: none">• Five required courses• Three 39-hour electives<ul style="list-style-type: none">◦ Two 19.5-hour courses are considered equivalent to one 39-hour course• Cumulative grade point average (GPA) of 1.67+ <p>To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our Glossary of Terms. If certificate requirements change and courses are no longer available, you may request Course Substitutions/Directives. You must apply to graduate on my.ryerson (RAMSS) within the appropriate application deadlines (refer to Important Dates). Visit Graduation for details.</p>	
Admission Criteria	—
<p>Recommended:</p> <ul style="list-style-type: none">• An undergraduate degree <p>OR</p> <ul style="list-style-type: none">• A 3-year community college diploma <p>OR</p> <ul style="list-style-type: none">• Mature student status with a high school diploma and 4 years of progressive work experience in public relations practice, or in a business, professional, or technical field	
Professional Development	+
Awards and Financial Aid	+
Contact Us	+

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Publishing

 Certificate

FULLY ONLINE

Meet Anna: Chang School Learner, Certificate in Publishing



Publishing is all about access: access to industry professionals, industry knowledge, and job opportunities. Our Certificate in Publishing is not only the largest professional training program for the publishing industry in Canada, but it opens doors for our continuous learners to enter the industry and provides them the tools they need to navigate and succeed. Our graduates go on to thrive in book publishing and related sectors, like corporate, non-profit, and government communications.

Get Connected 

Industry and Careers

This certificate could lead to a career in:

- Book publishing: including trade, educational, scholarly, and reference publishing
- Literary magazine and journal publishing
- Publishing in corporate, non-profit, and government communications

In roles such as:

- Business (acquisitions, contracts, rights)
- Editorial
- Sales
- Marketing and publicity
- Production and design

Who Should Take This Certificate?

This certificate program will teach you the skills and knowledge you need to succeed in the publishing industry.

You may be interested if you:

- Want to enter the publishing industry and are looking for a quick path to career-specific training
- Work in the publishing industry or in areas where publishing skills are required
- Are considering a career change

Register now 

Required Courses

[CDPB 100 Publishing Overview: Trade](#)

Next Offered: Fall 2022

[CDPB 200 Publishing Overview: Education](#)

Next Offered: Fall 2022

Electives: 39-Hour Courses (select 6)

2 19.5-hour courses may be completed as the equivalent of 1 39-hour course.

[CDPB 101 The Business of Book Publishing](#)

Next Offered: Winter 2023

[CDPB 102 Copy and Stylistic Editing I](#)

Next Offered: Fall 2022

[CDPB 103 Production for Books, Journals, and Reports](#)

Next Offered: Fall 2022

[CDPB 104 Introduction to Book Design](#)

Next Offered: Fall 2022

[CDPB 105 Sales and Marketing for Book Publishers](#)

Next Offered: Fall 2022

[CDPB 110 Publicity for Book Publishers](#)

Next Offered: Fall 2022

[CDPB 201 Literary Rights Management](#)

Next Offered: Fall 2022

[CDPB 202 Substantive and Stylistic Editing](#)

Next Offered: Fall 2022

[CDPB 212 Visual Skills for Publishing](#)

Next Offered: Fall 2022

[CDPB 222 Copy and Stylistic Editing II](#)

Next Offered: Fall 2022

[CDPB 312 Practical Grammar and Punctuation](#)

What Will You Learn?

You can take a full range of online courses covering the latest in print and digital publishing, including overviews of industry sectors and skills-based training in editing, production and design, sales, marketing and publicity, literary rights and the business of book publishing, and digital publishing.

This certificate program is fully online, which gives you the flexibility to take classes anytime, anywhere, and at your own pace.

Plus, enrolled learners have access to job postings and paid internship opportunities for a year after taking their last course in the program.

Certificate Requirements

- Two required courses
- Six 39-hour electives
 - Two 19.5-hour courses are considered equivalent to 1 39-hour course
- Cumulative grade point average (GPA) of 1.67+

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria

Recommended:

- Undergraduate degree

OR

- Mature student status with related professional experience and education

If you are an undergraduate student in your final year, please contact the academic coordinators at publish@ryerson.ca.

Awards and Financial Aid

Frequently Asked Questions

Contact Us

Next Offered:Fall 2022

[CDPB 803 Digital Publishing and Production](#)

Next Offered:Fall 2022

Electives: 19.5-Hour Courses

2 19.5-hour courses may be completed as the equivalent of 1 39-hour course.

[CDPB 300 Children's Classics in the 21st C](#)

Next Offered:Fall 2022

[CDPB 301 Publishing for Children](#)

Next Offered:Fall 2022

[CDPB 302 Government Reports](#)

Next Offered:Winter 2023

[CDPB 304 Scholarly and Reference Publishing](#)

Next Offered:Spring/Summer 2023

[CDPB 306 Trade Books: Fiction](#)

Next Offered:Fall 2022

[CDPB 309 Editing Books for Children and Teens](#)

Next Offered:Fall 2022

[CDPB 310 Proofreading for Books, Journals, and Reports](#)

Next Offered:Fall 2022

[CDPB 311 Indexing for Books, Journals, and Reports](#)

Next Offered:Fall 2022

[CDPB 313 Mktg Books for Children and Teens](#)

Next Offered:Fall 2022

[CDPB 314 Legal Publishing](#)

Next Offered:Spring/Summer 2023

[CDPB 315 Editing Recipes and Cookbooks](#)

Next Offered:Fall 2022

[Ryerson University has changed its name. Find out more.](#)

Retail Management

 Certificate

FULLY ONLINE

Hot Careers Spotlight: Retail Management



Kickstart or advance your career in retail – the largest employment sector in Canada. Operating a successful retail business is becoming a greater challenge than ever before. As a retail professional, you must apply your skills and knowledge to analyze changing demographics, build relationships with customers as well as suppliers, and oversee the integration of a global supply chain, in addition to identifying new trends. Our Certificate in Retail Management is tailored to the unique and growing needs of the retail industry, including strategic thinking, advanced communication skills, organizational development, and market planning.

Get Connected 

Industry and Careers

This certificate can lead to career paths in roles such as:

- Allocation analysis
- Category management
- Customer relations management
- Ecommerce
- Merchandise planning
- Pricing analysis
- Retail buying
- Store operations
- Visual merchandising

Who Should Take This Certificate?

- Retail employees seeking professional development or career advancement
- Working professionals seeking a career change
- Canadian newcomers seeking entry in domestic retail organizations
- Managers of small retail operations seeking enhanced entrepreneurial skills
- High school graduates who want to eventually pursue the [BComm degree in Retail Management](#)

What Will You Learn?

After completing this certificate, you will able to:

<https://continuing.ryerson.ca/public/category/courseCategoryCertificateProfile.do?method=load&certificateId=171627>

Register now 

Required Courses

[CRMG 200 Intro to Retail and Services Management](#)

Next Offered: Fall 2022

[CRMG 302 Retail Consumer Insight](#)

Next Offered: Spring/Summer 2023

Electives (select 4)

[CENT 500 New Venture Startup](#)

Next Offered: Fall 2022

[CGMS 200 Introduction to Global Management](#)

Next Offered: Fall 2022

[CMHR 405 Organizational Behaviour](#)

[CMHR 523 Human Resources Management](#)

[CMKT 100 Principles of Marketing](#)

Next Offered: Fall 2022

[CRMG 301 Retail Operations Management](#)

[CRMG 303 Managing the Retail Workplace](#)

Next Offered: Spring/Summer 2023

[CRMG 400 Merchandise Buying and Planning I](#)

Next Offered: Winter 2023

[CRMG 434 Intro to Logistics and Supply Chain Mgmt](#)

Next Offered: Winter 2023

[CRMG 452 Visual Merchandising and Space Planning](#)

Next Offered: Fall 2022

[CRMG 806 Retailer Perspectives on Category Management](#)

[CRMG 902 Franchising](#)

Next Offered: Winter 2023

[CRMG 907 Relationship Marketing](#)

Next Offered: Spring/Summer 2023

[CRMG 909 Merchandise Buying and Planning II](#)

After completing this certificate, you will able to:

- Assess key profit drivers and broad marketing/operational strategies
- Understand consumer behaviour and what defines brand value
- Apply customer relationship management (CRM) tools and best practices
- Analyze productivity issues from multiple perspectives
- Develop skills in assessing costs and profitability tied to:
 - inventory planning
 - management
 - promotions
 - consumer insights

Certificate Requirements

- 2 required courses*
- 4 electives
- Cumulative grade point average (GPA) of 1.67+

*If you demonstrate the requisite combination of education and work experience, you may apply to the academic coordinator to waive CRMG 200. If granted a waiver, you will need to complete 5 electives (instead of 4) to fulfill the certificate requirements.

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria

Recommended:

- Ontario Secondary School Diploma (OSSD) or equivalent
 - With 6 Grade 12 U or M credits

AND one of the following:

- [Mature student status](#)
- A recent undergraduate degree or college diploma
- A minimum of 1 year related professional experience in the retail industry

If you are an undergraduate student, you should be aware of possible certificate restrictions. Check [Curriculum Advising](#) [↗](#) for complete details.

Professional Development

Awards and Financial Aid

Contact Us

[CRMG 910 Omni-Channel Retailing](#)

Next Offered:Winter 2023

[CRMG 911 Retail Sales Management](#)

Next Offered:Winter 2023

[CRMG 916 Managing B2B Channels](#)

[CRMG 919 Visualizing Data for Decisions](#)

Next Offered:Spring/Summer 2023

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Robotics and Embedded Systems



Register now

FULLY ONLINE

Industrial robotics, personal and service robots, and factory automation systems are becoming increasingly important to the economy as automation expands across the private and public sectors, which means there are plenty of career opportunities in this field.

This certificate will help you advance or change your career while developing the technical knowledge and skills to provide hands-on innovation through robotics and embedded systems products and devices.

Get Connected

Real World Expertise - Rob...



Required Courses

[CKRE 110 Digital Logic and Hardware Architecture](#)

[CKRE 120 Programming Robotics Systems](#)

Next Offered:Spring/Summer 2023

[CKRE 130 Embedded Systems Hardware Architecture and Implementation](#)

[CKRE 140 Real-Time Embedded Systems Programming](#)

Next Offered:Fall 2022

[CKRE 150 Emerging Issues in Robotics and Embedded Systems](#)

Next Offered:Fall 2022

[CSCI 130 Mobile Robotic Devices Embedded Systems](#)

Next Offered:Fall 2022

Industry and Careers

According to Global Affairs Canada, the robotics ecosystem in Canada is far-reaching and has applications in the following industries:

- Aerospace
- Automotive
- Defense and security
- Electronics
- Healthcare

This certificate can lead to career paths in roles such as:

- Automation engineer
- Communications and networking professional
- Control systems technologist
- C programming software specialist
- Embedded systems software device development professional
- Human-computer interaction specialist
- Machine-human interaction specialist
- Roboticists
- Robotics engineers
- Technologist

Who Should Take This Certificate?

This certificate is intended for professionals with experience with computer programming – in any language – and/or who have hands-on technical industry experience.

Individuals who are seeking to enter the following professional fields:

- Consumer electronics
- Green technology products

• Green technology products

- Robotics
- Manufacturing automated machinery
- Medical Devices
- Telecommunications products

What Will You Learn?

After completing this certificate, you will able to:

- Build mobile robotic devices and program embedded systems for product and automated device development
- Use your newly gained skills in microprocessor-based control systems, systems-on-chip (SoC) design, and device software development
- Program mobile robotic devices
- Implement systems design in mobile robots and robotic devices

Tools in use include the following:

- C, C++, or Python
- Customized robotics kits

Certificate Requirements	—
<div><ul style="list-style-type: none">• 6 required courses• Cumulative grade point average (GPA) of 1.67+</div> <p>To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our Glossary of Terms. If certificate requirements change and courses are no longer available, you may request Course Substitutions/Directives. You must apply to graduate on my.ryerson (RAMSS) within the appropriate application deadlines (refer to Important Dates). Visit Graduation for details.</p>	
Admission Criteria	—
<div><p>Recommended:</p><ul style="list-style-type: none">• Mature student status with evidence of relevant college or university level coursework, or equivalent<p>OR</p><ul style="list-style-type: none">• Mature student status relevant industrial or professional experience in business</div>	
Awards and Financial Aid	+
Frequently Asked Questions	+
Contact Us	+

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*Sidebar Menu for Teaching at The Chang School	yes
2020/21 Photography Exhibition	yes
A Fresh Start at a University Degree Thanks to Spanning the	yes
Aboriginal Foundations Program	yes
Academic Bridging Courses (ABCs)	yes
Academic Policies, Procedures, and Regulations	yes
Academic and Career Advising	yes
Accessibility	yes
Alumni	yes
Arts, Music, and Culture	yes
Build On Your Community Services Career	yes
Bursaries	yes
CECL FAQ	yes
CESAR: Continuing Education Students' Association of Ryerson	yes
Cancellations	yes
Cannabis Essentials	yes
Career Professionals	yes
Certificate Registration	yes
Chang+ Mobile App Terms of Service and Privacy Policy	yes
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Course and Tech Info Your Term Start-up Checklist	yes
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Fees	yes
Fees & Financial FAQ	yes
Fees & Financial FAQ	yes
Financial Basics Workshop	yes
Five Tips to Get Ahead Post Pandemic The CSCH	yes
For Social Services Employers	yes
Foundations in Data Science Bootcamp	yes
Gateway for International Professionals	yes

Grade Appeals	yes
Grades	yes
Green Economy Bridging Program	yes
High School Graduates	yes
How experiential learning led to a more fulfilling career	yes
How to Register for a Certificate Program	yes
Important Dates for Fall 2019	yes
Important Dates for Fall 2020	yes
Important Dates for Spring 2021	yes
Important Dates for Spring/Summer 2019	yes
Important Dates for Spring/Summer 2020	yes
Important Dates for Winter 2020	yes
Important Dates for Winter 2021	yes
International Accounting and Finance Professionals (IAFP)	yes
International Midwifery Pre-registration Program (IMPP)	yes
International Students	yes
International Students	no
International Students	yes
Internationally Educated Social Work Professionals (IESW)	yes
Job Postings for Instructors	yes
Laddering Programs: Flexible Pathways to a Bachelor of Comme	yes
Letters of Permission	yes
Merit-Based Awards for Community Engagement Programs	yes
Middle-level Managers (MLM)	yes
Missed Mid-Term and Final Exam Procedure	yes
New Students	yes
New in 2021/2022	yes
Non-Tuition Related Fees and Service Charges	yes
Not Ready to Apply to Undergrad?	yes
Online Learning During COVID-19	no
Open Education Resource (OER) Grant for CECLs	yes
Open Educational Resources (OER)	yes
Pathways to Part-Time Degrees	yes
Policies	yes
Professional Designations and Accreditation	yes
Professional Development for CECLs	yes
Programs for 50+ and Community Engagement	yes
RU Web to Lead	yes
RU login help links	yes
Refunds	yes
Registration Policies	yes
Request or Retrieve Your Ryerson Student Number	yes
Ryerson Student OneCard	yes
Ryerson University Now (RUN) Program	no

STEM Fast Tracks	yes
Services and Support	yes
Spanning the Gaps - Access to Post-Secondary Education	yes
Student Home	yes
Student Records	yes
Teaching at The Chang School	yes
Thank You for Joining Our Mailing List	yes
The Art of Business	yes
The amazing story of Retail Management at Ryerson	yes
Transition Foundations Program	yes
Undergraduate Students	yes
Undergraduates From Other Universities	yes
Veterans Transition to Education (VTE)	yes
What It Takes to Be a Privacy Professional	yes
What It's Like to Work in Tech in Canada	yes
What does it take to be a privacy professional?	yes
What is Academic Bridging?	yes

Notes

Are we changing the name of CESAR? I haven't touched this part of this page yet. This is also an inactive piece of

Mentions CESAR

Still need to confirm CESAR name

CESAR is mentioned
Duplicate of above

This is inactive

What's the new abbreviation for Ryerson Test of English Proficiency (RTEP) – B;

Mention of CESAR

Inactive

This page is inactive

content

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Social Sciences and Humanities Foundations

Certificate

Register now

FULLY ONLINE

Strengthen your application for a full-time undergraduate degree with the Certificate in Social Sciences and Humanities Foundations. From the degree-credit courses, you will gain a sense of what studying social sciences and humanities in university is like, without having to fully commit to a degree program. Once you're ready to move forward in your academic journey, many of the courses can be transferred as credits to college and university degree programs. Invest in yourself and develop university-level skills, such as critical thinking, problem-solving, research, and writing with this flexible certificate program.



Get Connected

Industry and Careers

A wide range of professions and industries require the foundational skills of critical thinking, problem-solving, research, and writing that the social sciences and humanities provide. Those who have acquired these creative, analytical, and communication skills are better able to shift across a changing employment landscape as well as upward within their profession.

Who Should Take This Certificate?

- Individuals who are interested in exploring degree-credit courses in social sciences and humanities before formally applying to university
- Individuals who are looking to strengthen their application to a full-time undergraduate degree program

What Will You Learn?

The certificate courses are drawn from the first-year foundation of Ryerson's Faculty of Arts undergraduate programs.

The required courses will help you develop and enhance your skills in critical thinking, problem-solving, research, writing, and presenting your ideas.

Elective courses cover a wide range of topics in the social sciences and humanities, allowing you to explore specific areas that interest you that you may want to pursue academically or professionally.

Required Courses

[CSSH 105 Critical Thinking I](#)

Next Offered: Spring/Summer 2022

[CSSH 205 Academic Writing and Research](#)

Next Offered: Fall 2022

Electives – Group A: Humanities (select 2)

Students may select a course in Arabic (CARB), American Sign Language (CASL), Chinese (CCHN), French (CFRE), or Spanish (CSPN) as part of this category. However, an online placement test is required; visit the [Department's website](#) for details.

[CACS 100 Ideas That Shape the World I](#)

[CACS 210 Ideas that Shape the World: Antiquity](#)

[CENG 110 Literatures Across Borders](#)

Next Offered: Fall 2022

[CENG 208 Introduction to Non-Fiction](#)

[CHIS 104 Ten Days That Shook The World](#)

[CHIS 105 Inventing Popular Culture](#)

Next Offered: Spring/Summer 2022

[CHIS 106 Technology, Warfare and Social Change](#)

Next Offered: Spring/Summer 2023

[CHIS 107 Colonization, Colonialism and Independence](#)

[CPHL 101 Plato and the Roots of Western Philosophy](#)

Next Offered: Spring/Summer 2023

[CPHL 201 Problems in Philosophy](#)

Next Offered: Spring/Summer 2022

[CPHL 333 Philosophy of Human](#)

<div>Certificate Requirements</div>	—
<div><div><div><div><div><div></div></div><div>2 required courses: CSSH 105 and CSSH 205</div></div><div><div><div></div></div><div>4 electives: 2 in Group A - Humanities and 2 in Group B - Social Sciences*</div></div></div><div><div><div></div></div><div>Cumulative grade point average (GPA) of 1.67+</div></div></div></div> <div><div>*Students may select a course in Arabic (CARB), American Sign Language (CASL), Chinese (CCHN), French (CFRE), or Spanish (CSPN) as part of the Electives - Humanities category. However, an online placement test is required; visit the Department's website ↗ for details.</div><div>To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our Glossary of Terms. If certificate requirements change and courses are no longer available, you may request Course Substitutions/Directives. You must apply to graduate on my.ryerson (RAMSS) within the appropriate application deadlines (refer to Important Dates). Visit Graduation for details.</div></div>	
<div>Admission Criteria</div>	—
<div><div><div>Recommended:</div><div><div><div></div></div><div>Ontario Secondary School Diploma (OSSD) or equivalent</div><div><div><div></div></div><div>With 6 Grade 12 U or M credits</div></div></div></div><div><div>OR</div><div><div><div></div></div><div>Mature student status</div></div></div><div><div>Note:</div><div>If you do not meet the above stated admission criteria, you must complete CENG 110 (from Electives - Group A: Humanities) as one of your four electives.</div></div><div><div>If you are an undergraduate student, you should be aware of possible certificate restrictions. Check Curriculum Advising ↗ for complete details.</div></div></div>	
<div>Awards and Financial Aid</div>	+
<div>Contact Us</div>	+

<div><div><div>Nature</div><div>Next Offered:Fall 2022</div></div></div>	
<div><div><div><div>CPHL 366 Existentialism and Art and Culture</div><div>Next Offered:Winter 2023</div></div></div></div>	
<div><div><div>Electives – Group B: Social Sciences (select 2)</div></div></div>	—
<div><div><div><div>CCRM 100 Introduction to Canadian Criminal Justice</div><div>Next Offered:Fall 2022</div></div></div></div>	
<div><div><div><div>CCRM 102 Introduction to Criminology</div><div>Next Offered:Spring/Summer 2022</div></div></div></div>	
<div><div><div><div>CECN 104 Introductory Microeconomics</div><div>Next Offered:Spring/Summer 2022</div></div></div></div>	
<div><div><div><div>CECN 204 Introductory Macroeconomics</div><div>Next Offered:Spring/Summer 2022</div></div></div></div>	
<div><div><div><div>CEUS 102 Environment and Sustainability</div></div></div></div>	
<div><div><div><div>CEUS 202 Sustaining the City's Environments</div></div></div></div>	
<div><div><div><div>CGEO 131 Energy, Earth and Ecosystems</div><div>Next Offered:Fall 2022</div></div></div></div>	
<div><div><div><div>CGEO 151 Location, Location, Location</div><div>Next Offered:Fall 2022</div></div></div></div>	
<div><div><div><div>CPOG 100 People, Power and Politics</div><div>Next Offered:Fall 2022</div></div></div></div>	
<div><div><div><div>CPOG 110 Power and Influence in Canadian Politics</div><div>Next Offered:Winter 2023</div></div></div></div>	
<div><div><div><div>CPPA 101 Cdn Public Administration I: Institutions</div><div>Next Offered:Fall 2022</div></div></div></div>	
<div><div><div><div>CPPA 102 Cdn Public Administration II: Processes</div><div>Next Offered:Spring/Summer 2022</div></div></div></div>	
<div><div><div><div>CPSY 102 Introduction to Psychology I</div><div>Next Offered:Spring/Summer 2022</div></div></div></div>	
<div><div><div><div>CPSY 202 Introduction to Psychology II</div><div>Next Offered:Spring/Summer 2022</div></div></div></div>	
<div><div><div><div>CSOC 105 Introduction to Sociology</div></div></div></div>	
<div><div><div><div>CSOC 107 Sociology of the Everyday</div><div>Next Offered:Spring/Summer 2023</div></div></div></div>	
<div><div><div><div>CSSH 100 Inquiry and Problem-Solving</div></div></div></div>	
<div><div><div><div>CSSH 102 Learning and</div></div></div></div>	

[Development Strategies](#)

[CSSH 301 Research Design and Qualitative Methods](#)

Next Offered:Spring/Summer 2022

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Strategic Marketing Management

Certificate

[Register now](#)

The marketing industry is undergoing a rapid transformation. New technologies are changing how companies identify, target, and interact with consumers. Companies are ethically and, in some cases, legally bound to societal trends towards corporate social responsibility, social marketing, and sustainability. These ongoing changes demand highly-skilled creative, strategic and analytical thinkers.

[Get Connected](#)

Achievers at The Chang S...



Our Certificate in Strategic Marketing Management helps you understand the latest technologies and advancements in marketing through hands-on, practical learning. Choose our general stream to build a range of fundamental marketing skills, or focus on a particular area of interest by taking electives from our specialized streams:

- Marketing innovation
- Marketing research
- Social media
- Sports marketing

Industry and Careers

This certificate can lead to career paths in roles such as:

- Account manager
- Brand manager
- Content marketing specialist
- Customer insights analyst
- Digital marketing manager
- Customer insights analyst
- Marketing data analyst
- Social media strategist

Who Should Take This Certificate?

- Graduates looking to complement their degree or diploma with marketing skills to give them a competitive edge as they start their careers
- Marketing professionals that are seeking career advancement by gaining expertise in a specific area and upgrading their skills in the age of analytics
- Working professionals wanting to make a career change, seeking entry into the industry by learning the fundamentals of marketing

What Will You Learn?

In this certificate program, you will learn how to:

- Understand the fundamentals of marketing, including theories, principles, and concepts of market behaviour

Required Courses

[CMKT 100 Principles of Marketing](#)

Next Offered: Fall 2022

[CMKT 300 Marketing Metrics and Analysis](#)

Next Offered: Fall 2022

Electives (select 4 or 5)

[CGMS 522 International Marketing](#)

Next Offered: Fall 2022

[CITM 350 Concepts of e-Business](#)

Next Offered: Fall 2022

[CMKT 400 Understanding Consumers and the New Media](#)

Next Offered: Fall 2022

[CMKT 500 Marketing Research](#)

Next Offered: Fall 2022

[CMKT 504 Effective Persuasion](#)

Next Offered: Fall 2022

[CMKT 510 Innovations in Marketing](#)

Next Offered: Fall 2022

[CMKT 535 Integrated Marketing Communications](#)

[CMKT 600 Integrated Case Analysis](#)

Next Offered: Spring/Summer 2023

[CMKT 700 Business Intelligence/Decision Modeling](#)

[CMKT 702 Advanced Marketing Management](#)

[CMKT 723 Services Marketing](#)

Next Offered: Fall 2022

[CMKT 730 Assessing/Managing Market Opportunities](#)

[CMKT 731 Competitive Intelligence](#)

[CMKT 828 Sport Marketing Concepts and Strategy](#)

[CMKT 829 International Sport](#)

- Interpret and satisfy customer expectations by creating, developing, managing, and delivering products and services
- Apply quantitative and qualitative analyses to measure the success of marketing initiatives
- Engage state-of-the-art contemporary supply and demand marketing metrics and analytic tools, such as marketing research, share of mind, margins and profits, product, Salesforce, and channel management
- Use the case method – integrating marketing theory and marketing metrics – as a model for critically analyzing situations and developing evidence-based, ethical decision-making skills
- Create and evaluate integrated marketing plans that may include product/brand management, marketing research, advertising, public relations, media buying, and/or digital marketing

[Marketing](#)

[CMKT 850 Applied Research Project](#)

Certificate Requirements

- 2 required courses*
 - [CMKT 100](#)
 - [CMKT 300](#)
- Any 4 electives
- Cumulative grade point average (GPA) of 1.67+

*If you demonstrate the requisite combination of education and work experience, you may apply to the academic coordinator to waive CMKT 100. If granted a waiver, you will need to complete 5 electives (instead of 4) to fulfill the certificate requirements.

To graduate, you must successfully complete, within your official time span, the requirements from the year you registered in the program. For more information, refer to Time Span in our [Glossary of Terms](#). If certificate requirements change and courses are no longer available, you may request [Course Substitutions/Directives](#). You must apply to graduate on [my.ryerson](#) (RAMSS) within the appropriate application deadlines (refer to [Important Dates](#)). Visit [Graduation](#) for details.

Admission Criteria

Required:

- Ontario Secondary School Diploma (OSSD) or equivalent
 - With 6 Grade 12 U or M credits

OR

- Mature student status with relevant professional experience in business

If you are an undergraduate student, you should be aware of possible certificate restrictions. Check [Curriculum Advising](#) [↗](#) for complete details.

Professional Development

Frequently Asked Questions

Awards and Financial Aid

Contact Us

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Sustainability Management and Enterprise Process Excellence



Register now

Important Note: The Certificate in Sustainability Management and Enterprise Process Excellence will not be accepting any new registrants. This certificate has been discontinued effective Winter 2022. Students formally registered in the certificate prior to November 2, 2021 must complete the program requirements in effect at the time they registered. For curriculum details, please refer to the [archived calendar](#) for your year of registration. For more information, please contact ce@ryerson.ca.

If this certificate interests you, you may want to check out our Certificate in [Food Security](#).

Required Courses: Planned Final Offerings for Sustainability Management

	CKSS100	CKSS101	CKSS210	CKSS211
Spring 2022	✓			✓
Fall 2022		✓		
Winter 2023			✓	

Please note the open enrolment dates for the following semesters:

- Fall 2022: Enrolment opens June 6, 2022
- Winter 2023: Enrolment opens August 8, 2022

* Many Elective courses will continue to run regular offerings in future terms

Required Courses

- [CKSS 100 Fundamentals in Sustainability I](#)
Next Offered:Fall 2022
- [CKSS 101 Fundamentals in Sustainability II](#)
Next Offered:Winter 2023
- [CKSS 210 Lean Six Sigma Contin Improvement](#)
Next Offered:Winter 2023
- [CKSS 211 Lean Six Sigma Sust Bus Enterprise](#)

Electives (select 2)

- [CECN 502 Economics of Energy and Natural Resources](#)
- [CECN 510 Environmental Economics](#)
- [CFNY 404 Food Policy and Programs for Food Security](#)
Next Offered:Spring/Summer 2023
- [CFNY 407 Community Development and Food Security](#)
Next Offered:Spring/Summer 2023
- [CHTT 510 Sustainable Tourism: the Golden Goose?](#)
- [CKAR 500 Sustainable Buildings](#)
Next Offered:Fall 2022
- [CKAR 601 Building Science for Architectural Preservation and Conservation](#)
Next Offered:Fall 2022
- [CKLA 400 Ecology and Sustainable Landscapes](#)
- [CKLA 450 Landscape Restoration](#)
Next Offered:Spring/Summer 2023
- [CKSS 102 Designing a Sust-Enterprise](#)
- [CKSS 201 Sustainability Topics and Trends](#)
- [CKSS 212 Lean Six Sigma Quality Assurance](#)

CTEC 210 Fundamentals of Project Management

Next Offered: Fall 2022

CTEC 241 Energy Innovation

CTEC 264 Trends in Smart Grid

CTEC 269 Trends in Energy Conservation

CTEC 282 Public Policy in Energy

CVFN 410 Understanding Urban Agriculture

Next Offered: Fall 2022

CVFN 411 Dimensions of Urban Agriculture

Next Offered: Spring/Summer 2023

CVFN 412 Practicing Urban Agriculture

CVFN 413 Urban Agriculture Policy-Making

Next Offered: Winter 2023

CZMN 200 Corporate Responsibility & Sustainability

Next Offered: Fall 2022

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Urban Agriculture

Certificate

NEW FOR FALL 2020

FULLY ONLINE

Urban agriculture is not only a growing field, but a necessary one. As people continue to move into cities, there will be an added need for professionals with urban agriculture training to lead the sustainability path in building resilient city regions. If you're looking for a career to help create positive change in your community, our Certificate in Urban Agriculture will help you get there. This four-course, fully-online certificate equips you with the knowledge, skills, and practical experience to address food system challenges in local and global contexts.



Get Connected

Industry and Careers

This certificate can help you grow your career in a range of industries like urban planning, environmental studies, public health, international development and more.

This certificate can lead to career paths in roles such as:

- Municipal Planner or Policymaker
- Coordinator or Project Manager in Urban Agriculture, Plant Innovation, or Rooftop/Community Gardens
- Public Gardens Or Field Production Staff
- Coordinator or Project Manager or Consultant in Ecological Planning
- Consultant In Sustainable Development
- Project Manager in a Local Authority, Urban Planning or Environmental Department, or Development Agency

Who Should Take This Certificate?

- Students and recent graduates with relevant degrees (e.g. nutrition and food, urban planning, sociology, architecture, etc.) wishing to gain a specialization in urban agriculture.
- Individuals with experience in the urban agriculture sector, seeking additional training or expanded understanding of the overall scope of the field, including business entrepreneurs, ecological, urban and health planners, municipal planners, environmental advocates, development officers, urban food growers, staff of parks, and other city departments.

What Will You Learn?

After completing this certificate, you will able to:

Register now

Required Course

[CVFN 410 Understanding Urban Agriculture](#)

Next Offered:Fall 2022

Required Elective (select 2)

[CVFN 411 Dimensions of Urban Agriculture](#)

Next Offered:Spring/Summer 2023

[CVFN 412 Practicing Urban Agriculture](#)

[CVFN 413 Urban Agriculture Policy-Making](#)

Next Offered:Winter 2023

General Elective (select 1)

[CENT 500 New Venture Startup](#)

Next Offered:Fall 2022

[CFNY 403 Food Security Concepts and Principles](#)

Next Offered:Fall 2022

[CFNY 408 Urban Food Security](#)

Next Offered:Winter 2023

[CFNY 510 Indigenous Food Systems in Canada](#)

Next Offered:Winter 2023

[CKLA 400 Ecology and Sustainable Landscapes](#)

[CKSS 100 Fundamentals in Sustainability I](#)

[CVFN 400 Practicum/Project in Urban Agriculture](#)

Next Offered:Fall 2022

[CVFN 420 Green/Natural Infrastructure](#)

Next Offered:Fall 2022

Through your choice of electives, you can concentrate on an area of focus like:

- Analyze the relationships between urban agriculture and multiple dimensions of urban management, including health and nutrition, social and cultural development, local economic development, and environmental management
- Identify how urban agriculture can advance food security, food sovereignty, and environmental sustainability through planning and policy
- Apply participatory and gender-sensitive concepts, tools, and processes, such as situation analysis, action planning, and policy design with diverse urban agriculture stakeholders
- The study of social behaviour
- Applications of psychology in organizations

NEW Course!

In our newest online course, [CVFN 420 - Green/Natural Infrastructure](#), you'll gain core knowledge about green/natural infrastructure practices (such as street tree planting, green roofs, rainwater harvesting) – via guest speakers, virtual site tours, interactive modules and more.

Certificate Requirements	—
<ul style="list-style-type: none">• One required course• Two required electives• One general elective• Cumulative grade point average (GPA) of 1.67+	
Admission Criteria	—
<div>Recommended:</div> <ul style="list-style-type: none">• OSSD with six Grade 12 U or M credits (including English), with a minimum average of 60 percent, or equivalent <div>OR</div> <ul style="list-style-type: none">• mature student status with relevant work experience	
Awards and Financial Aid	+
Contact Us	+