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Introduction to Privacy, Access, & Information Management

In our current data-driven economy, the rapid proliferation of emerging technologies poses significant implications with the regard to the protection of personal data and access to information. This program equips learners from all sectors with the foundational knowledge and skills needed to navigate the complex and often unpredictable world of privacy and access.

Required Courses

- ☐ **CLAW 401** **Information Access and Privacy Protection**
- ☐ **CZIT 427** **Data and Info. Mgmt for Privacy**
- ☐ **CZLW 327** **Privacy By Design**

Course Series Requirements

- **Successful completion of 3 required courses**

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

3-D Printing, Visualization, & Agile Product Prototyping

Learn to execute agile product design, product sculpture, and prototyping with 3-D printers. Realize your designs, animations, and product prototypes using 3-D printers.

In each course, you will prepare a 3-D model ready for optional 3-D printing at Toronto Metropolitan University's 3-D Printing Lab.

This is an Open Admissions program to help you advance or change your career.

No previous background is required.

Required Courses (select 4)

- ☐ CKCS 230 **Intro to SOLIDWORKS for 3-D Printing**
- ☐ CKCS 231 **Product 3-D Animation/Rendering**
- ☐ CKCS 232 **3-D Printing: Agile Prototyping**
- ☐ CKCS 233 **Product Design for 3-D Printing**
- ☐ CKCS 234 **Product Drawing for 3-D Printing**

Course Series Requirements

- **Successful completion of 4 required courses**

Supplies to be purchased by the student:

You are required to purchase (or already own) the following software: Pixologic ZBrush and ZSpheres, Autodesk Mudbox, SOLIDWORKS, DynaMesh, and 3-D computer graphics software that saves objects in the STL (stereolithography) format. As well, you must own or have access to a laptop, tablet, tablet pen, and an external hard drive.

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

American Sign Language (ASL)

Learn American Sign Language (ASL), the most commonly used sign language for Deaf communities in Canada, the United States, and many other countries around the world.

ASL employs a range of movements in the hands, face, and body. ASL has been used for over 250 years, and is now estimated to be used more than 500,000 people in Canada and the US.

All courses within this course series are delivered in class, allowing you to practise with your instructors and fellow students.

You will learn from a combination of lectures, in-class demonstrations, dialogues, conversations, videos, and practice using audiovisual support.

Required Courses (Select 2)

- ☐ CASL 101 **Introductory American Sign Language I**
- ☐ CASL 201 **Introductory American Sign Language II**
- ☐ CASL 301 **Intermediate American Sign Language I**
- ☐ CASL 401 **Intermediate American Sign Language II**

Course Series Requirements

- **Successful completion of 2 required courses**

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Applied Analytics & Statistics for 21st Century Decision-Making

Learn to analyze data and statistics, forecast predictions, and execute real-world, predictive analysis projects (including using SAS) to provide evidence-based decision-making.

This program offers a focused grounding in 21st century applied statistical and analytical skills in the most up-to-date techniques in statistical analysis that are sought after in today's workplace. It is open to anyone who is interested in a professional career in business, industry, government, or research.

No previous background is required.

This is an Open Admissions program to help you advance or change your career. Those who successfully complete this three-course program are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education.

The professional development award may be achieved in one of the following ways:

Required Courses (Option 1)

The professional development award may be achieved completing courses in either this Option or Option 2.

You may only select one of CMTH 304 or CMTH 380.

- | | |
|-----------------------------------|--------------------------------------|
| <input type="checkbox"/> CIND 123 | Data Analytics: Basic Methods |
| <input type="checkbox"/> CMTH 304 | Probability |
| <input type="checkbox"/> CMTH 380 | Probability and Statistics I |
| <input type="checkbox"/> CMTH 404 | Statistics |

Required Courses (Option 2)

The professional development award may be achieved completing courses in either this Option or Option 1

- | | |
|-----------------------------------|--|
| <input type="checkbox"/> CIND 123 | Data Analytics: Basic Methods |
| <input type="checkbox"/> CQMS 210 | Applied Statistics for Business |

Course Series Requirements

- **Successful completion of courses in Option 1**
(CIND 123, (CMTH 304 or CMTH 380), and CMTH 404)
- OR
- **Successful completion of courses in Option 2**
(CIND 123, and CQMS 210)

Note: Course selections may not be combined from both groups.

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Architectural Preservation

This is a highly technical program consisting of courses focused on subjects related to building renovation, restoration and rehabilitation, and historical preservation and conservation. The program is designed to provide graduates with specific knowledge and skills in architectural preservation and conservation.

No previous background is required.

Learn to design and execute renovations, restorations and rehabilitations and historical preservation and conservation of buildings.

This is an Open Admissions program to help you advance or change your career. Those who successfully complete this three-course program are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education.

Required Courses

- ☐ **CKAR 205** **Building Codes and Regulations**
- ☐ **CKAR 310** **Materials and Methods**
- ☐ **CKAR 601** **Building Science for Architectural Preservation and Conservation**

Course Series Requirements

- **Successful completion of 3 required courses**

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Architectural Technologists Professional Career Foundations

Learn the latest in Canadian best practices and standards for materials and methods, building codes, and sustainable buildings' mechanical and electrical systems.

This program offers the solid foundational educational requirements and skill sets necessary to begin preparation toward accreditation as an architectural technologist. It is intended for those aspiring to be architectural technologist professionals who are currently in high demand with employers in architectural firms, governments, and construction companies.

No previous background is required.

This is an Open Admissions program to help you advance or change your career. Those who successfully complete this four-course program are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education.

Required Courses

- ❑ **CKAR 205** **Building Codes and Regulations**
- ❑ **CKAR 215** **Computer-Aided Architectural Drawing**
- ❑ **CKAR 310** **Materials and Methods**
- ❑ **CKAR 500** **Sustainable Buildings**

Course Series Requirements

- **Successful completion of 4 required courses**

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

CATIA Engineering Design

This program provides students with foundational, applied, and academic knowledge and skill sets in CATIA design. The courses offer students a comprehensive picture of current best practices in CATIA design and real-life industry applied case studies. They allow students to meet their individual interests in extending their knowledge and skills needed to support engineering design and product development. This knowledge and applicable skill set will be useful for technical digital practitioners whether they are serving on commercial, para-public, national defence, municipal, provincial, and national or international structural design projects or product development projects.

No previous background is required.

You will have the opportunity to acquire and use technical skill sets and best practices in CATIA design, together with analyses of real-life industry and engineering case studies. You will learn to transform and execute CAD system logistics with CATIA as products and design contexts change.

This is an Open Admissions program to help you advance or change your career. Those who successfully complete this 2 course program are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education.

Required Courses

- ☐ **CKAE 100** **CATIA Engineering Design I**
- ☐ **CKAE 101** **CATIA Engineering Design II**
- ☐ **CKAE 102** **CATIA Engineering Design III**

Course Series Requirements

- **Successful completion of 2 required courses**

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Children's Publishing

Want to find out more or ask a question about the Course Series in Children's Publishing? Connect with this program by email.

This course series is intended for individuals who wish to specialize in this dynamic and growing sector within the book publishing industry. Toronto is the centre for children's publishing in Canada, and Canada is a recognized leader in children's publishing worldwide. In-depth training in children's publishing will prepare our students for entry into this vibrant sector.

This course series offers the following benefits:

- Enrol right away — open admissions with no application required
- Complete from wherever you are through a fully online format
- Get real industry experience by responding to postings for job and paid internship opportunities
- Earn a Professional Development Award on successful completion of all courses
- Use these courses towards the Certificate in Publishing
- Apply for merit-based awards

Required Courses

- ❑ CDPB 300 Children's Classics in the 21st C
- ❑ CDPB 301 Publishing for Children
- ❑ CDPB 309 Editing Books for Children and Teens
- ❑ CDPB 313 Mktg Books for Children and Teens

Course Series Requirements

- **Successful completion of 4 required courses**

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Coding, Programming, & Algorithms: Computer Science Fundamentals

Are you looking to get into coding?

Our program is designed to help you build your career in coding and computer programmers in software engineering. In this course series, you will receive training in the most popular programming languages (Java, C, and Python) and operating system (UNIX).

Bridging into Computer Science Graduate Program

Individuals who complete this course series and hold a 4-year undergraduate degree (or equivalent) in any field are qualified to apply to the Masters of Science in Computer Science program at Toronto Metropolitan University.

Individuals who complete this course series and hold a research-based graduate degree in any field are qualified to apply to the Doctoral program in Computer Science at Toronto Metropolitan University.

While there is no guarantee of admission into the graduate program, completion of this course series enhances a student's application by providing a formal background in computer science.

No previous background is required.

You will learn to program and code professionally in the most popular programming languages among employers: Python, Javascript, and C++.

Acquire skills and techniques for maintaining an operating system (UNIX).

This is an Open Admissions program to help you advance or change your career. Those who successfully complete this three-course program are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education.

Required Courses

☐ CCPS 305 **Data Structures**

Electives (select 2)

☐ CCPS 109 **Computer Science I**

☐ CCPS 209 **Computer Science II**

☐ CCPS 616 **Algorithms**

Course Series Requirements

- **Successful completion of 1 required course**
- **Successful completion of 2 electives**

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Creative Photography

If you have a passion for photography, welcome to the Course Series in Creative Photography. Short-term courses between 12 and 24 hours in the evenings, and/or weekends, will test your creative abilities. Landscape, documentary, websites, portfolio development, portraits, and even pinhole digital imaging are some of the courses offered. Courses will be taught by professional photographers who work in the industry and who will help you create your ideas.

This course series offers the following benefits:

- Enrol right away — open admissions with no application required
- Take courses in any order — no prerequisites needed
- Earn a Professional Development Award on successful completion of all courses
- Use applicable courses towards the Certificate in Photography Studies
- Exhibit your creative work through special events
- Apply for merit-based awards

Equipment/Facilities Use

Please note that equipment and facilities use outside of class time will not be provided. All course work requiring use of TMU equipment and facilities must be done during class time only.

Required Courses (Select 3)

Select a minimum of 3 courses, totalling a minimum of 60 hours.

- | | |
|-----------------------------------|--|
| <input type="checkbox"/> CDFP 312 | Art Direction for Ad Agencies |
| <input type="checkbox"/> CDFP 318 | Photographing in the Field |
| <input type="checkbox"/> CDFP 319 | Documentary Project |
| <input type="checkbox"/> CDFP 355 | Digital B&W Photography |
| <input type="checkbox"/> CDFP 388 | Pinhole Digital Images |
| <input type="checkbox"/> CDFP 414 | Traditional Photography |
| <input type="checkbox"/> CDFP 417 | Night Photography |
| <input type="checkbox"/> CDFP 418 | Landscape Photography |
| <input type="checkbox"/> CDFP 419 | Exploring Toronto Landscapes |
| <input type="checkbox"/> CDFP 420 | Making a Photographic Book |
| <input type="checkbox"/> CDFP 421 | The Interpretive Portrait |
| <input type="checkbox"/> CDFP 422 | Commercial Portraits |
| <input type="checkbox"/> CDFP 423 | The Portable Portrait Flash |
| <input type="checkbox"/> CDFP 424 | Introduction to Lightroom |
| <input type="checkbox"/> CDFP 425 | Lightroom Advanced |
| <input type="checkbox"/> CDFP 432 | Digital Printing Workshop |
| <input type="checkbox"/> CDFP 907 | Using a 4X5 View Camera |
| <input type="checkbox"/> CDFP 908 | Using Your Digital Camera |
| <input type="checkbox"/> CDFP 915 | The Travelling Camera |
| <input type="checkbox"/> CDFP 924 | Gallery Hopping |
| <input type="checkbox"/> CDFP 925 | Smartphones as a Fine Art Tool |
| <input type="checkbox"/> CDFP 929 | The Business of Photography |
| <input type="checkbox"/> CDFP 945 | Creative Child and Animal Portraits |

Course Series Requirements

- **Successful completion of 3 required courses (totalling a minimum of 60 hours)**

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Creative Writing

Note: This course series is currently under review. If you're interested in this course series or learning more about creative writing, reach out to our Client Services team at ce@torontomu.ca.

Required Courses (select 3)

Select a minimum of 3 courses, totalling a minimum of 60 hours.

- ☐ CWWR 110 Introduction To Creative Writing
- ☐ CWWR 120 Writing Poetry
- ☐ CWWR 130 Creative Nonfiction Essay Writing
- ☐ CWWR 336 True to Life: Writing Your Own Story
- ☐ CWWR 367 The Art of Promotional Writing
- ☐ CWWR 410 Short Fiction Writing - Level I
- ☐ CWWR 411 Short Fiction Writing - Level II
- ☐ CWWR 415 Fiction and Non-Fiction Writing
- ☐ CWWR 420 Novel Writing - Level I
- ☐ CWWR 446 Writing Television Situation Comedy
- ☐ CWWR 450 From The Horse's Mouth - Getting Published
- ☐ CWWR 514 Works In Progress: One-On-One Creative Writing Workshop
- ☐ CWWR 952 Creative Travel Writing

Early Childhood Mental Health & Well-Being

This course series can be completed entirely online.

This program offers professionals in the field of early learning and care the opportunity to enhance professional practice skills related to child and family health, well-being, early intervention, and inclusive practices. Students will critically explore frameworks, theories, and practices — both current and evolving — as they relate to the children and families with whom they work.

Required Courses

- ☐ CCLD 342 **Assessment for Programming**

Electives (Select 2)

- ☐ CCLD 442 **Infant Mental Health**
- ☐ CCLD 444 **Therapies for Young Children**
- ☐ CCLD 445 **Inclusion and Consultation**
- ☐ CCLD 446 **Children and Chronic Illness**

Course Series Requirements

- **Successful completion of 1 required course**
- **Successful completion of 2 electives***

*You may choose to focus on a specific area to achieve your individual goals. The electives may be grouped as follows:

- Health and Well-Being: CCLD 444, CLD 446
- Professional Practice: CCLD 442, CCLD 445

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Entrepreneurship & Small Business

The three courses required for this course series will provide an essential body of knowledge needed to start and/or grow a business venture within a multicultural context.

Required Courses (Select 3)

You may only select one of CENT 526 or CENT 601.

- ☐ **CENT 500** **New Venture Startup**
- ☐ **CENT 505** **Small-Business Management**
- ☐ **CENT 526** **Entrepreneurial Behaviour and Strategy**
- ☐ **CENT 601** **Identifying Opportunities**

Course Series Requirements

- **Successful completion of 3 required courses**

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Film Production Techniques Using Mobile Devices

Want to find out more about the Course Series in Film Production Techniques Using Mobile Devices? Express interest to connect with this program and receive updates.

The current trends in mobile devices have provided consumers and media professionals alike with the tools to capture imagery and audio in ways that have never existed before with such immediacy. Instruction will include topics such as visual story telling, techniques for fiction and documentary filmmaking, video production techniques for social and informal media, editing and advanced postproduction techniques, and video publishing techniques for distribution to various media.

This course series offers the following benefits:

- Enrol right away — open admissions with no application required
- Take courses in any order — no prerequisites needed
- Earn a Professional Development Award on successful completion of all courses
- Exhibit your creative work through special events
- Apply for merit-based awards

Equipment/Facilities Use

Please note that equipment and facilities use outside of class time will not be provided. All course work requiring use of Toronto Metropolitan University's equipment and facilities must be done during class time only.

Required Courses (Select 4)

- ☐ **CDMP 350** **Visual Story Telling**
- ☐ **CDMP 351** **Filmmaking Techniques**
- ☐ **CDMP 352** **Video Productions Techniques**
- ☐ **CDMP 353** **Film Editing Techniques**
- ☐ **CDMP 354** **Advanced Post-Production**
- ☐ **CDMP 355** **Video Publishing Techniques**

Course Series Requirements

- **Successful completion of 4 required courses**

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Financial Predictive Data Analytics

Learn to analyze financial data and statistics, forecast financial predictions, and execute real-world, predictive financial analysis projects (including querying financial data using R and Python) to provide evidence-based financial decision-making.

No previous background is required.

This is an Open Admission program to help you advance or change your career. Those who successfully complete this 3 course program are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education.

Required Course

- ☐ CMTH 501 Numerical Analysis

Electives (Select 2)

- ☐ CIND 123 Data Analytics: Basic Methods
- ☐ CMTH 304 Probability
- ☐ CMTH 380 Probability and Statistics I
- ☐ CMTH 404 Statistics
- ☐ CMTH 480 Probability and Statistics II

Course Series Requirements

- Successful completion of 1 required course
- Successful completion of 2 electives

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Fine Art Practice

This program is an opportunity to develop practical fine art skills and gain knowledge of art history. The studio courses cover drawing, graphic design, animation, and drafting for set design. The art history courses cover prehistoric to modern art.

This course series offers the following benefits:

- Enrol right away — open admissions with no application required
- Take a mix of online and in-class courses
- Take Toronto Metropolitan University degree-credit courses
- Earn a Professional Development Award on successful completion of all courses
- Use applicable courses towards the Certificate in Design for Arts and Entertainment, the Certificate in Digital Art Production, the Certificate in Film Studies.
- Apply for merit-based awards

Required Courses (Select 3)

- | | |
|-----------------------------------|---------------------------------------|
| <input type="checkbox"/> CDFA 104 | Fashion Drawing I |
| <input type="checkbox"/> CDID 170 | Drafting for Entertainment |
| <input type="checkbox"/> CFPN 534 | Graphic Design |
| <input type="checkbox"/> CFPN 541 | Animation Practices |
| <input type="checkbox"/> CMPC 101 | Visual Studies I: Design Fundamentals |
| <input type="checkbox"/> CMPC 103 | Reframing Art History |
| <input type="checkbox"/> CMPC 203 | Art in the Contemporary World |

Course Series Requirements

- Successful completion of 3 required courses

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Gender & Sexuality

Explore critical and theoretical perspectives on gender and sexuality through this course series. Choose from a variety of courses that will deepen your understanding of the important interrelationships of gender, sexuality, and society.

Required Courses

- ☐ CSOC 633 **Sex, Gender Identities, and Sexualities**

Required Courses (Select 2)

- ☐ CCRM 515 **Gendering Justice**
- ☐ CENG 602 **Women's Writing**
- ☐ CFNF 400 **The Social Context of Human Sexuality**
- ☐ CFNY 409 **Gender and Food Security**
- ☐ CHST 658 **Sex in the City**
- ☐ CINT 906 **Sexuality: Power and Pleasure**
- ☐ CPHL 606 **Philosophy of Love and Sex**
- ☐ CPOL 501 **Women, Power and Politics**
- ☐ CPOL 510 **The Politics of Sexual Diversity**
- ☐ CSOC 885 **Women, Islam and Modernity**

Course Series Requirements

- **Successful completion of 1 required course**
- **Successful completion of 2 electives**

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Hadoop, Python, & Tableau Big Data Tools

Acquire hands-on technical programming skills for Hadoop, Python, and Tableau Big Data Tools Administration.

Learn how to perform big data analytics queries on unstructured data, visual data, and social media data using Hortonworks, SQL, Hadoop, R, Python, Excel and Tableau.

You will learn up-to-date techniques in prediction and analyses of large and complex data. These technical skill sets are sought after in most fields across private, public, and non-profit sectors.

This is an Open Admissions program to help you advance or change your career. Classes take place in a computer lab on-campus at Toronto Metropolitan University. You are not required to bring your own laptop to class.

No previous background is required.

Required Courses (Select 2)

- | | |
|-----------------------------------|---------------------------------------|
| <input type="checkbox"/> CKCS 103 | Intro to Full Stack Web Developer |
| <input type="checkbox"/> CKCS 107 | Data Analytics Through Excel |
| <input type="checkbox"/> CKCS 113 | Intro to Machine Learning |
| <input type="checkbox"/> CKCS 115 | Big Data Location Analyst |
| <input type="checkbox"/> CKCS 116 | Crowd-Sourcing Big Data |
| <input type="checkbox"/> CKCS 117 | Sharing Economy Big Data |
| <input type="checkbox"/> CKCS 118 | Big Data and Virtual Reality |
| <input type="checkbox"/> CKCS 150 | Introduction to Programming in Python |
| <input type="checkbox"/> CKCS 155 | Intro to Hadoop and Tableau |

Course Series Requirements

- **Successful completion of 2 required courses**

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Caring Clown

Celebrating 10 Years of Caring Clown

In celebration of 10 years of creativity, humour, and compassion, our partners at The City of Toronto Seniors Services and Long-Term Care Division put together this moving video tribute to the Caring Clown program.

Want to embark on a unique and purposeful learning experience?

Give back to your community and help improve the quality of life of long-term care residents. Explore your sense of fun and your compassionate spirit.

The Caring Clown course series combines basic clowning skills of spontaneity, playfulness, and humour with compassion and caring. Added to the mix are music and movement. No special skills are required — just a willingness to learn and be open to new challenges!

Clowns come from all walks of life. Some have been teachers, social workers, lawyers, engineers or business professionals. Most are retired, but many also work part-time. Although Caring Clowns wear red noses, their costumes and characters are reflective of eccentric cousins, aunts, or uncles you may remember growing up.

Caring Clowns serve residents who generally have mid to advanced dementia. Many of the residents are confined to wheelchairs, and are isolated, lonely, and in need of cheer.

This course series is part of Programs for 50+ and Community Engagement at The Chang School.

Required Courses

- ☐ **CSCC 900** **Caring Clown**
- ☐ **CSCC 910** **Caring Clown II**
- ☐ **CSCC 911** **Caring Clown Practicum**

Introduction to Health Data Analytics

This program is designed for students who want to fill gaps in their professional health background to achieve greater professional development and/or transition careers into the health field. The demand for healthcare professionals with data analytical skills is growing in both health-specific and health-related fields, especially with the increase in accountability policies and the requirement of many health graduate programs that students have courses in this area to be admitted.

Required Courses

- ☐ **CHIM 301** **Healthcare Information Analysis**
- ☐ **CHIM 408** **Statistics for Health Services Managers**
- ☐ **CHSM 301** **The Healthcare Systems**

Course Series Requirements

- **Successful completion of 3 required courses**

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Health Ethics

Students will be provided with opportunities for exploring and examining ethical considerations in health and healthcare systems.

Required Courses

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

- ☐ CPHL 302 **Ethics and Health Care**
- ☐ CPHL 444 **Ethics in Health Services Management**
- ☐ CPHL 509 **Bioethics**
- ☐ CPHL 602 **Health Policy: Ethics and Justice**

Course Series Requirements

- **Successful completion of 3 required courses**

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Health Informatics

Students will be introduced to the basic concepts of health informatics from both the information technology and health systems perspectives.

Required Courses (Select 3)

- ☐ CHIM 303 Intro to Health Coding Classification
- ☐ CHIM 305 Introduction to Health Informatics
- ☐ CHIM 306 Healthcare Interoperability
- ☐ CHIM 307 Human-Computer Interfaces in Healthcare
- ☐ CLAW 402 Health Information Access and Privacy

Course Series Requirements

- Successful completion of 3 required courses

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Health Services Management

Students will be introduced to the basic principles of health services management.

This course series can be completed entirely online.

Required Courses

- ☐ CHSM 301 **The Healthcare Systems**
- ☐ CHSM 305 **The Management Cycle**
- ☐ CHSM 437 **Human Resources Management in Healthcare**

Course Series Requirements

- ♦ **Successful completion of 3 required courses**

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

The Human Body

Adults are increasingly aware of their need to learn how to transform their habits and lifestyles based on scientific evidence and to meet the health requirements of their age and health situations. This course series will provide opportunities for adults to learn about the human body and impacts to its health, including the biology- and chemistry-based science of food.

Learning about the human body requires space, time, and informed educators to provide current science and guide group discussions. Toronto Metropolitan University's Biology and Chemistry faculty deliver the science content and subject matter experts provide a synthesis of the content with current scientific findings, while also ensuring a high level of engagement and participation in group discussions.

Each course in the series will explore the science of the human body and how one can use food science to make informed and healthy choices as he or she progresses through life. The courses will provide students with the knowledge and skill sets helpful in gaining or enhancing critical understanding of the human body.

Required Courses

- | | |
|-----------------------------------|--|
| <input type="checkbox"/> CBLG 101 | Anatomy and Physiology I |
| <input type="checkbox"/> CBLG 111 | Anatomy and Physiology II |
| <input type="checkbox"/> CKBG 110 | The Science of Food Foundations |
| <input type="checkbox"/> CKBG 115 | The Science of Supplements |

Course Series Requirements

- **Successful completion of 4 required courses**

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Interdisciplinary Conflict Resolution & Team Building

This course series provides health and community services professionals and students with the knowledge and skills to work in interdisciplinary teams with a specific focus on understanding the nature of conflict and its root causes as well as team building. Students will explore a range of conflict resolution methods, approaches, and strategies. The relationship between conflict, conflict resolution, and issues of diversity will be addressed. The interpersonal skills and personal and professional values that impact on working in teams and the dynamics of an effective team will also be considered.

Required Courses

- ☐ CINT 905 **Conflict Resolution in Community Services**
- ☐ CINT 907 **Team Work for Community Services**

Electives (Select 1)

- ☐ CINT 920 **Community Collaborations**
- ☐ CINT 921 **Writing Bodies Differently**
- ☐ CSWP 935 **Engaging Diverse Communities**

Course Series Requirements

- **Successful completion of 2 required course**
- **Successful completion of 1 elective**

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Internationally Trained Medical Doctors (ITMD) Bridging Program

Not ready to enrol but want to learn more?

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

The goal of this unique learning opportunity is to successfully integrate highly qualified, skilled, and experienced internationally trained medical doctors (ITMDs) into non-licensed healthcare employment. The program provides additional skills needed for participants to gain employment in health research, health informatics, data analysis, and health management positions in Canada as an alternative to medical doctor licensing.

Required Courses

- ☐ CKHS 100 Health Research Methodology
- ☐ CKHS 110 Health Informatics and Data Management
- ☐ CKHS 120 Fund of PM for Health Professionals
- ☐ CKHS 140 Health Pro Comm and Ldshp Skills
- ☐ CKHS 150 Multidisc Hlth Rsrch/Mgnt Seminar

Supplementary Course

The following course will give you the opportunity to further develop your learning and professional skills; however, it is not required for the Professional Development Award.

- ☐ CKHS 130 Practicum Placement

Course Series Requirements

- Successful completion of 5 required courses

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, email the ITMD Bridging Program at itmds@ryerson.ca with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award.

The Internet of Things (IoT)

This program explores the technologies, architectures, and strategies for the streaming of IoT and how “always-on” data streams are managed, scaled, secured, and monetized around services, and solutions, and specifically on future connected cars, SMART cities, wearables, SMART home architectures and the Cloud, IoT analytics, IoT Open Source, connected virtual and augmented reality. Topics include emerging IoT technologies and monetization and value creation of IoT for economic prosperity and the social good.

No previous background is required.

In this course series you will learn how to operationalize technologies and strategies for the streaming of the Internet of Things (IoT). You will learn about how “always-on” data streams are managed, scaled, secured, and monetized around services, and solutions. This course series has applications in future and current technology industries including driverless cars and vehicles, smart cities, wearables and home architectures.

This is an Open Admissions program to help you advance or change your career. Those who successfully complete this three-course program are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education

Required Courses

- ☐ CKCS 180 IoT 360 Connectivity to the World
- ☐ CKCS 181 Emerging IoT Technologies
- ☐ CKCS 182 IoT Monetization and Value Creation

Course Series Requirements

- **Successful completion of 3 required courses**

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Marketing Innovation

Canada's competitiveness in the world depends on the ability to innovate. Having a good idea is not enough to be successful and there are specialized skills required to bring a new product or service to market. This program is for students interested in the development and marketing of new products and services.

Required Courses

- ☐ CMKT 300 **Marketing Metrics and Analysis**
- ☐ CMKT 400 **Understanding Consumers**
- ☐ CMKT 730 **Assessing/Managing Market Opportunities**

Electives (Select 1)

- ☐ CMKT 500 **Marketing Research**
- ☐ CMKT 510 **Strategic Brand Management**
- ☐ CMKT 535 **Integrated Marketing Communications**
- ☐ CMKT 723 **Services Marketing**
- ☐ CMKT 731 **Competitive Intelligence**

Course Series Requirements

- **Successful completion of 3 required courses**
- **Successful completion of 1 elective**

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Marketing Research

This program provides various techniques to measure marketing performance in organizations; it introduces the use of theories of social sciences and metrics to allow marketers to understand, analyze, and respond to consumer needs in the digital age. Students will learn how to effectively prepare, analyze, and interpret large databases and use both qualitative and quantitative tools to make strategic and sound marketing decisions.

Required Courses

You may only select one of CMKT 400 or CMKT 700.

- ☐ **CMKT 300** **Marketing Metrics and Analysis**
- ☐ **CMKT 400** **Understanding Consumers**
- ☐ **CMKT 500** **Marketing Research**
- ☐ **CMKT 700** **Marketing Analytics and Decision-Making**

Course Series Requirements

- **Successful completion of 3 required courses**

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Paediatric Health Assessment

These courses will build on nurses' existing health assessment expertise by providing advanced knowledge and specific skills for the assessment of infants, children, and adolescents. Nurses will have the opportunity to broaden their expertise with system-specific assessment approaches across all paediatric developmental stages and diverse healthcare needs. This course series includes a course held at the state-of-the-art SickKids Simulation Lab.

Required Courses (Select 3)

- ☐ CVNU 113 Paediatric Health Assessment
- ☐ CVNU 114 Paediatric Health Assessment Workshop

Course Series Requirements

- **Successful completion of 2 required courses**

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Patient Safety & Nursing Informatics

This program blends the concepts of nursing informatics as a specialty nursing practice and its impact on promoting safe patient care within the context of clinical information and technology. The program will be of interest to nurses who are seeking to broaden their frontline and leadership experience and expertise in nursing informatics.

Required Courses

- ☐ CHSM 301 **The Healthcare Systems**
- ☐ CVNU 322 **Computer and Information Management in Nursing**

Course Series Requirements

- ♦ **Successful completion of 2 required courses**

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Professional Healthcare Careers Foundations

Meet your academic university undergraduate degree course requirements to apply for entrance to healthcare career professional schools, namely: medical school, veterinary school, dentistry school, pharmacy school, midwifery school, physical therapy school, optometry school, osteopathy school, podiatry school, speech pathology, and graduate programs including environmental biology and biomedical sciences/engineering.

No previous background required. This course series is completed in class.

This is an Open Admissions program to help you advance or change your career. Those who successfully complete this three-course program are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education.

Required Courses (Select 3)

- ☐ CBCH 261 Biochemistry
- ☐ CBLG 101 Anatomy and Physiology I
- ☐ CBLG 111 Anatomy and Physiology II
- ☐ CCHY 113 General Chemistry II
- ☐ CBLG 143 Biology I
- ☐ CBLG 144 Biology II
- ☐ CBLG 151 Microbiology I
- ☐ CBLG 311 Cell Biology
- ☐ CCHY 103 General Chemistry I
- ☐ CCHY 142 Organic Chemistry I
- ☐ CCHY 242 Organic Chemistry II
- ☐ CCHY 381 Physical Chemistry I
- ☐ CMTH 125 Mathematics for Professional Programs
- ☐ CMTH 131 Modern Mathematics I
- ☐ CMTH 207 Calculus and Computational Methods I
- ☐ CMTH 231 Modern Mathematics II
- ☐ CMTH 304 Probability
- ☐ CMTH 310 Calculus and Computational Methods II
- ☐ CMTH 404 Statistics
- ☐ CPCS 110 Physics
- ☐ CPCS 120 Physics I
- ☐ CPCS 130 Physics II

Course Series Requirements

- **Successful completion of 3 required courses**

*You may choose to focus on a specific area to achieve your individual goals. The electives may be grouped as follows:

Biology: CBLG101, CBLG111, CBLG 143, CBLG 144, CBLG 151, CBLG 311
Chemistry: CCHY 103, CCHY 242, CCHY 381, CCHY 113, CCHY 142, CBCH 261

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Project & Workplace Budgets Coordination

This program is designed for individuals who wish to acquire the hardcore skill sets to carry out budgeting and coordination of a variety of projects in the workplace. It provides training in high demand skills such as budget creation, cost control, workplace budget management, mobile project management, and project oversight and execution.

Note: Advanced Excel skills will be taught in this program.

Required Course (Select 1)

- ☐ CKPM 217 Agile Project Management
- ☐ CTEC 210 Fundamentals of Project Management

Electives (Select 2)

- ☐ CKCS 107 Data Analytics Through Excel
- ☐ CKPM 212 Project Cost and Procurement Management
- ☐ CKPM 219 Mobile Project Management

Course Series Requirements

- Successful completion of 1 required course
- Successful completion of 2 electives

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Project Management

Learn the skills necessary to become a project management professional. If you are already working as a project manager, upskill and earn professional development units (PDUs) to maintain your professional credentials.

No previous background is required and this course series can be completed entirely online.

This is an Open Admissions program to help you advance or change your career. Those who successfully complete this three-course program are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education.

This short course series is an excellent complement to the skills you may already possess as a professional.

Required Courses (Select 3)

- ☐ CKPM 203 Planning and Scheduling
- ☐ CKPM 209 Project Risk and Quality Management
- ☐ CKPM 211 Leadership in Project Management
- ☐ CKPM 217 Agile Project Management
- ☐ CKPM 219 Mobile Project Management
- ☐ CTEC 210 Fundamentals of Project Management

Course Series Requirements

Successful completion of 3 required courses*

*You may choose to focus on a specific area to achieve your individual goals. The electives may be grouped as follows:

Project Management Foundation: These courses cover the fundamentals of project management, planning and scheduling, and project management systems (Microsoft Project).

CKPM 203, CKPM 217, CTEC 210

Project Management Practitioner: These courses focus on managing risk and quality, as well as leading teams.

CKPM 209, CKPM 211, CTEC 210

Agile Project Management: To cater to entrepreneurial and digital environments, these courses present agile and emerging trends in project management.

CKPM 217, CKPM 219, CTEC 210

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Research Methodologies & Program Evaluation

This program offers an introduction to quantitative and qualitative research methodologies from anti-oppression, anti-colonial, and anti-racism perspectives to social work students and community practitioners. Using these perspectives, participants will also acquire the skills necessary to design and evaluate social programs and their own practice.

Required Courses

- ☐ CSWP 538 **Social Work Research: Part I**
- ☐ CSWP 638 **Social Work Research: Part II**
- ☐ CSWP 932 **Evaluating Social Work Practices**

Course Series Requirements

- **Successful completion of 3 required courses**

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Retail Buying

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

Required Courses

- ☐ CRMG 400 Merchandise Buying and Planning I
- ☐ CRMG 452 Visual Merchandising and Space Planning

Electives (Select 1)

You may only select one of CRMG 806 or CRMG 909. If you intend to write the Category Management Certification Exam, you should take CRMG 806.

- ☐ CRMG 806 Retailer Perspectives on Category Management
- ☐ CRMG 909 Merchandise Buying and Planning II

Course Series Requirements

- Successful completion of 2 required courses
- Successful completion of 1 elective

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Retail Operations & Sales Management

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

Required Courses

- ☐ **CRMG 301** **Retail Operations Management**
- ☐ **CRMG 303** **Managing the Retail Workplace**
- ☐ **CRMG 911** **Retail Sales Management**

Course Series Requirements

- **Successful completion of 3 required courses**

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Science, Technology, Engineering, & Mathematics (STEM)

Not ready to enrol but want to learn more?

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

Gain the knowledge to become a professional in science, technology, engineering, and math (STEM) in the private and public sectors. This could include professions in Information Technology (IT), research positions, entrepreneurship, and more.

If you are already in STEM, this is a chance to upskill your soft transferable skills while gaining in-demand professional skill sets such as: entrepreneurship, innovative venture start-ups management, critical thinking, problem-solving, solution-building and execution, and interpersonal workplace relationship-building skills.

This is an Open Admissions program to help you advance or change your career. Those who successfully complete this three-course program are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. No previous background is required and this course series can be completed entirely online, depending on your course selection.

This short course series is an excellent complement to the skills you may already possess as a professional.

Required Courses (Select 1)

- ☐ CENT 500 New Venture Startup
- ☐ CENT 526 Entrepreneurial Behaviour and Strategy
- ☐ CENT 601 Identifying Opportunities

Electives (Select 2)

- ☐ CBCH 261 Biochemistry
- ☐ CBLG 143 Biology I
- ☐ CBLG 144 Biology II
- ☐ CBLG 151 Microbiology I
- ☐ CBLG 699 Social Factors in Drug Development
- ☐ CCHY 103 General Chemistry I
- ☐ CCHY 113 General Chemistry II
- ☐ CCHY 142 Organic Chemistry I
- ☐ CCHY 183 Introduction to Forensic Sciences
- ☐ CCHY 242 Organic Chemistry II
- ☐ CCHY 381 Physical Chemistry I
- ☐ CCHY 583 Alternative Energies
- ☐ CCPS 109 Computer Science I
- ☐ CCPS 305 Data Structures
- ☐ CCPS 311 Object Oriented Programming and Design
- ☐ CCPS 393 Introduction to UNIX, C and C++
- ☐ CKCH 216 Analytical Chemistry I
- ☐ CKCH 217 Analytical Chemistry Laboratory I
- ☐ CKCH 223 Analytical Chemistry II
- ☐ CKCH 224 Analytical Chemistry Laboratory II
- ☐ CKCS 160 CEH and CCE Comp Sec Exam Prep
- ☐ CKCS 230 Intro to SOLIDWORKS for 3-D Printing
- ☐ CKCS 231 Product 3-D Animation/Rendering
- ☐ CKCS 232 3-D Printing: Agile Prototyping
- ☐ CKCS 233 Product Design for 3-D Printing
- ☐ CKCS 234 Product Drawing for 3-D Printing
- ☐ CKDF 110 Computer Network Security
- ☐ CKDF 120 Computer Cryptography and Digital Steganography
- ☐ CKDF 130 Digital Forensics Systems
- ☐ CKDF 140 Security Architecture and Design
- ☐ CKDF 145 Certified Information Systems Security Professional (CISSP)
- ☐ CKMT 104 FRM Level I Exam Prep
- ☐ CKRE 110 Digital Logic and Hardware Architecture
- ☐ CKRE 120 Programming Robotics Systems
- ☐ CKRE 130 Embedded Systems Hardware Architecture and Implementation
- ☐ CMTH 304 Probability
- ☐ CMTH 404 Statistics

Continued on following page

Course Series Requirements

- **Successful completion of 1 required course**
- **Successful completion of 2 electives***

*You may choose to focus on a specific area to achieve your individual goals. The electives may be grouped as follows:

Emergency Management: CSCI 232, CSCI 241

Environmental Science Management and Science: CKES 120, CKES 170, CKES 180, CKES 210, CKES 220

Information Technology: CCPS 109, CCPS 305, CCPS 311, CCPS 393, CKCS 160, CKCS 230, CKCS 231, CKCS 232, CKCS 234, CDKF 110, CDKF 120, CDKF 130, CDKF 140, CDKF 145, CKRE 110, CKRE 120, CKRE 130, CMTH 304, CMTH 404, CMTH 642, CSCI 130, CSCI 243

Mathematics: CMTH 500, CMTH 501, CMTH 600, CMTH 700, CMTH 800

Organization Operations: CKMT 104, CSCI 232

Science: CBLG 143, CBLG 144, CBLG 151, CBLG 699, CCHY 103, CCHY 113, CCHY 183, CCHY 142, CCHY 242, CCHY 261, CCHY 381, CCHY 583, CKCH 216, CKCH 217, CKCH 223, CKCH 224, CKES 190, CPCS 111, CPCS 120, CPCS 130, CPCS 181, CPCS 182, CPCS 581, CBCH 261

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

- | | | |
|--------------------------|----------|---|
| <input type="checkbox"/> | CMTH 500 | Introduction to Stochastic Processes |
| <input type="checkbox"/> | CMTH 501 | Numerical Analysis I |
| <input type="checkbox"/> | CMTH 600 | Computational Methods In Mathematics |
| <input type="checkbox"/> | CMTH 642 | Data Analytics: Advanced Methods |
| <input type="checkbox"/> | CMTH 700 | Financial Mathematics I |
| <input type="checkbox"/> | CMTH 800 | Financial Mathematics II |
| <input type="checkbox"/> | CPCS 111 | Physics in the News |
| <input type="checkbox"/> | CPCS 120 | Physics I |
| <input type="checkbox"/> | CPCS 130 | Physics II |
| <input type="checkbox"/> | CPCS 181 | Introduction to Astronomy |
| <input type="checkbox"/> | CPCS 182 | Life in the Milky Way Galaxy |
| <input type="checkbox"/> | CPCS 581 | Advanced Topics in Astronomy |
| <input type="checkbox"/> | CSCI 130 | Mobile Robotic Devices Embedded Systems |
| <input type="checkbox"/> | CSCI 230 | Emergency Management Practice |
| <input type="checkbox"/> | CSCI 232 | Incident and Operations Management |
| <input type="checkbox"/> | CSCI 234 | Analysis of Critical Incidents |
| <input type="checkbox"/> | CSCI 241 | Planning for Emergency Management |
| <input type="checkbox"/> | CSCI 243 | Continuity and Risk Management |

Scientific Research Policy & Ethics

Learn to analyze and assess government science policy, drug development regulation, clinical trials practice, scientific project oversight, intellectual property, and/or the scientific and medical ethics required in order to advance to a professional leadership position.

No previous background is required.

This is an Open Admission program to help you advance or change your career. Those who successfully complete this three-course program are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education.

This short course series is an excellent complement to the skills you may already possess as a professional.

Required Courses (select 3)

- ☐ CBLG 605 Science and Government Policy Development
- ☐ CBLG 606 Intro to Clinical Research and Trials
- ☐ CBLG 607 Intellectual Property in Science
- ☐ CIND 123 Data Analytics: Basic Methods
- ☐ CKBG 120 Drug Development Regulations
- ☐ CKBG 135 Pharma Project Best Practices
- ☐ CPHL 509 Bioethics

Course Series Requirements

- Successful completion of 3 required courses

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Social Media Marketing

Marketing communications is in a state of transformation. This program is for students who want to learn more about how marketers can incorporate social media into their marketing plans and measure its impact; it integrates marketing metrics, marketing communications, and consumer behaviour.

Required Courses

- ☐ **CMKT 300** **Marketing Metrics and Analysis**
- ☐ **CMKT 400** **Understanding Consumers**
- ☐ **CMKT 510** **Strategic Brand Management**

Course Series Requirements

- **Successful completion of 3 required courses**

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Social Media Practices & Reputation Management

A social media presence enables senior management to share their perspectives with wider audiences, both external and internal, and garner reputational benefits from being online. Preparation for social media participation includes identifying the goals of social participation, selecting the right social platform, minimizing the risk of participation, and guiding the social conversation.

This course series offers the following benefits:

- Enrol right away — open admissions with no application required
- Complete from wherever you are through a fully online format
- Take Toronto Metropolitan University degree-credit courses
- Use these courses towards the Certificate in Public Relations
- Earn a Professional Development Award on successful completion of all courses
- Apply for merit-based awards

Required Courses

- ☐ **CDPR 100** **Public Relations Principles**
- ☐ **CDPR 108** **Social Media in Public Relations**
- ☐ **CDPR 110** **Reputation Management**

Course Series Requirements

- **Successful completion of 3 required courses**

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Website Design

Want to find out more about the Course Series in Website Design? Express interest to connect with this program and receive updates.

This program provides in-depth, practical, and theoretical information needed to design websites that effectively communicate and encourage interaction.

This course series offers the following benefits:

- Enrol right away — open admissions with no application required
- Take courses in any order — no prerequisites needed
- Take a mix of online and in-class courses
- Take Toronto Metropolitan University degree-credit courses
- Earn a Professional Development Award on successful completion of all courses
- Use applicable courses towards the Certificate in Digital Art Production
- Apply for merit-based awards

Required Courses

Students should select 3 of the courses below.

- | | |
|-----------------------------------|-------------------------------|
| <input type="checkbox"/> CEID 100 | Digital Skills and Innovation |
| <input type="checkbox"/> CFPN 534 | Graphic Design |
| <input type="checkbox"/> CFPN 535 | User Experience Design |
| <input type="checkbox"/> CFPN 542 | Design for Mobile Devices |

Course Series Requirements

- Successful completion of 3 required courses

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Workplace Communication in Canada (WCC) Bridging Program

Master the art of Canadian workplace communication and improve your career prospects

Every country has its own unique workplace culture — including Canada. What might be common in one region could be inappropriate in others. Want to learn how to thrive in the Canadian workplace? The Chang School's Workplace Communication in Canada (WCC) Bridge Training Program is designed to help internationally trained immigrants (ITIs) integrate into any local work environment, stress-free.

As the workforce becomes increasingly diverse, intercultural communication skills are more important than ever. The four courses in this program will help you understand cultural differences in communication and how to deal with common client-related situations, boosting your business savvy and productivity. Our curriculum focuses on projects and presentations to familiarize you with real-life common Canadian workplace scenarios.

You can complete the program online in as little as four months. When you successfully finish the course series, you will receive a Professional Development Award (PDA) from The Chang School.

This course series features training in:

- Personal skills, including:
 - showing initiative
 - demonstrating integrity and ethical behaviour
 - remaining motivated
 - maintaining a positive attitude
- Professional communication skills, including:
 - effective listening and speaking interviewing
 - working in a team
 - delivering presentations

We're here to support your Canadian career journey — start the WCC Bridge Training Program today.

Connect with Us

Want to learn more about the WCC Bridge Training Program?

Required Courses (Select 4)

- ☐ CDCE 700 **Effective Speaking and Listening**
- ☐ CDCE 710 **Intro to Interpersonal Communic.**
- ☐ CDCE 720 **Client-Centred Communication**
- ☐ CDCE 730 **Presenting with Impact**
- ☐ CDCE 740 **Teamwork Communication**

Course Series Requirements

- **4 required courses**

EarlyON Child & Family Centres

Harness the knowledge and skills required by both professionals in early learning and family supports to fully engage families from diverse communities during this time of transition in Ontario. Explore the needs of the broader community to serve families and children through courses that address the growing demand for expanded understanding - integrating knowledge from the fields of early learning and family supports. You'll learn strategies to support families in programs and services, approaches to work effectively across diverse groups, and gain competencies in meeting the developmental needs of children from birth to 12 years of age.

This course series can be completed entirely online.

Required Courses

- ☐ CCLD 231 Families in Canadian Context I
- ☐ CCLD 435 Theory and Practice of Family Support

Electives (Select 1)

- ☐ CVFS 406 Guiding Children's Development
- ☐ CINT 900 Program Planning and Evaluation Strategies

Course Series Requirements

- Successful completion of 2 required courses
- Successful completion of 1 elective

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Inclusive Media: Real-time Closed Captioning & Audio Description/Described Video

Learn how to use the latest live closed captioning (CC) and audio description/described video (AD/DV) techniques and technologies to create inclusive and accessible broadcast content for a variety of audiences. Through hands-on training and theoretical learning, explore CC and AD/DV software tools, script writing and re-speaking techniques, and relevant industry regulations and legislation. Industry experts will help you develop both fundamental and advanced skills for this growing field.

This course series offers the following benefits:

- Enrol right away — open admissions with no application required
- Earn a Professional Development Award on successful completion of all required courses
- Apply for merit-based awards

Required Courses (Select 4)

- | | |
|--|--|
| <input type="checkbox"/> CDIM 100 | Inclusive Media and Regulations |
| <input type="checkbox"/> CDIM 101 | Respeaking for Live Captioning |
| <input type="checkbox"/> CDIM 102 | Audio Description |
| <input type="checkbox"/> CDIM 103 | Advanced CC and Intro to NER |
| <input type="checkbox"/> CDIM 104 | Audio Description Advanced |

Course Series Requirements

- **Successful completion of 4 required courses**

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Leadership in Accessibility & Inclusion

Note: This course series is currently under review. If you're interested in this course series or learning more about the topic of accessibility and inclusion, reach out to our Client Services team at ce@torontomu.ca.

Increase inclusion and optimize accessibility in your workplace and community. This course series provides a foundation of knowledge on accessibility and inclusion and builds on this through courses on legislation, digital accessibility, employment, and public space design.

An experiential learning capstone course -- a project-based opportunity in the community provides the opportunity to apply the concepts and knowledge gained through your studies. Expand on your first hand experience with policy and organizational changes and build marketable hands-on experience as you build your personal network in the community.

This course series can be completed entirely online.

Required Courses

- ☐ CVAS 100 **Accessibility and Compliance Awareness**
- ☐ CVAS 110 **Accessibility Standards**
- ☐ CVAS 500 **Field Experience: Capstone**

Electives (Select 1)

- ☐ CVAS 200 **Introducing Digital Accessibility**
- ☐ CVAS 210 **Recruitment, Training, and Employment**
- ☐ CVAS 230 **Public Spaces**

Course Series Requirements

- **Successful completion of 3 required courses**
- **Successful completion of 1 elective**

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Workplace Mental Health in Healthcare Settings

This course series provides supervisors, managers, and directors the knowledge and understanding to manage the stress of frontline workers in healthcare settings. You will first explore the causes and impacts of on—the-job mental distress and post-traumatic stress disorder (PTSD), while learning about coping strategies and responsibilities of employers.

Next, leading practices to manage the spectrum of good psychological health and safety in the workplace will be exposed, using peer—to-peer learning opportunities that identify programs and services to support workers, as well as hands-on resources and learning plans.

Required Courses

- ☐ CVOH 110 **Promote Frontline Worker Mental Health**
- ☐ CVOH 115 **Support Frontline Worker Mental Health**

Course Series Requirements

- **Successful completion of 2 required courses**

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Cybersecurity

Cybercrime is at an all-time high and has the potential to affect everyone. The Canadian labour market has an acute shortage of technically and analytically skilled experts needed to fill cybersecurity professional jobs that can help thwart this global threat. Canadian employers lament that they can't fill the large number of roles.

To address this, The G. Raymond Chang School of Continuing Education has created a new, fully online Cybersecurity Fast Track Course Series program as part of the federal government's mandate to offer Canadians and Permanent Residents a four-week, open admissions, career-ready program in cybersecurity.

This program may be financed using the Canada Tax Credit Benefit. As part of your tuition, you may request at any time pre-arranged phone meetings with our cybersecurity tutor or with your course instructors.

In this two-course course series, comprising 78 hours of instruction, students gain hands-on, experiential learning by applying open-source cybersecurity technical applications. Specialized software and tools are also used in order to perform penetration testing, digital forensics, data protection, and network privacy solutions in private and public sector closed networks and cloud-based enterprise environments.

Various security techniques that are essential for any security professional will be introduced using state of the art virtual desktop infrastructure environment. The environment will have many virtual machines with pre-installed and configured tools to perform the various tasks expected from a security professional.

This course series will also cover some of the most popular techniques, including, CIA Triad, the different types of hacking, auditing, digital forensic, and incident response. Digital forensic techniques are used in the evidentiary process and the various methodologies intrinsic to computer forensics with an emphasis on computer incident response and information system protection.

For more information, email Client Services at ce@torontomu.ca and Academic Coordinator Alex Ferworn at aferworn@torontomu.ca

This is an open admissions program, which means you can enrol in these cybersecurity courses right away. No prior background is required.

Required Courses

- ❑ CKDF 110 **Computer Network Security**
- ❑ CKDF 130 **Digital Forensics Systems**

Colour Management Systems

Companies choose brand and product colours to enhance recognition and gain advantage in the marketplace, and accurate, consistent print and digital output is essential. Through this course series, gain a fundamental understanding of colour and colour management systems, and learn how to effectively manage colour across different platforms for both print and packaging using industry standard practices, tools, and procedures.

The three courses in this series combine theory with hands-on learning to increase your colour management skills and knowledge — practice what you've learned in state-of-the-art colour management labs. This series is suitable for industry professionals looking to increase their colour management competency beyond an introductory level.

This course series offers the following benefits:

- Enrol right away — open admissions with no application required
- Earn a Professional Development Award on successful completion of all courses
- Apply for merit-based awards

Required Courses

- ☐ **CDGA 110** **Colour Management - Intro**
- ☐ **CDGA 120** **Colour Management - Printing**
- ☐ **CDGA 130** **Colour Management - Packaging**

Course Series Requirements

- **Successful completion of 3 required courses**

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Blockchain for Business

For many, blockchain is all about “cryptocurrencies”, such as Bitcoin, however, the applications of blockchain are much broader than financial transactions. In fact, blockchain technology has been deemed as significant an invention as the Internet.

Blockchain has the potential to change business processes and models in a distributed and decentralized manner. This technology is deemed to be transformative for businesses across the world, transcending industries and geographies alike. Any business that makes use of an intermediary to verify transactions could make use of blockchain technology.

This course series aims to help fill a knowledge gap for professionals seeking essential knowledge in the ways in which blockchain technology works and how it can be applied effectively to solve business problems.

Blockchain for Business

- ❑ CZIT 200 **Blockchain Architecture and Applications**
- ❑ CZLW 200 **Blockchain: Risk Management**

Course Series Requirements

- ♦ **Successful completion of 2 required courses**

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Internationally Trained Health Professionals (ITHP) bridging program

(formerly ITMD - Internationally Trained Medical Doctors program)

Internationally educated health professionals are highly skilled individuals with a breadth of knowledge and experience. With the right tools, skills, and support to help guide them, they can gain meaningful employment in the Canadian healthcare sector. Our ITHP bridging program provides internationally educated professionals with Canadian-specific education and skills required to gain employment and hands-on support to ensure their success. This unique opportunity helps learners attain non-licensed healthcare employment in areas such as health research, health informatics, data analysis, and health administration (alternative careers in healthcare). Learners obtain more than just in-demand skills and knowledge — they are provided a supportive bridge to building a successful future in Canada.

This program offers continuous learners the opportunity to register in one of three specialized healthcare streams:

- Long-term Care and Ethics in Healthcare
- Health Research/Data Analytics in Healthcare/ Health Informatics
- Health Administration

Learners in each stream are required to take three to five courses, which includes courses in Job Search Strategies and Communications. The program also provides job search support to assist in finding future employment and an optional four to six-week work placement.

Industry and Careers

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

- Case manager
- Clinical administrator
- Clinical research associate
- Hospital scheduling coordinator
- Health services coordinator
- Long term care patient support assistant
- Hospital administration/administrator
- Medical office associate
- Patient services representative
- Long term care recreation aide
- Research assistant/associate

Who Should Take This Course Series?

Internationally educated healthcare professionals who are looking to reconfigure their existing professional knowledge to gain meaningful employment in non-licensed jobs within the healthcare sector in Canada.

What Will You Learn?

You will gain the following from this program:

- Increased knowledge of the Ontario healthcare system
- Canadian-specific job search strategies to help you secure future employment
- Work placements or work integrated learning opportunities
- Professional communication training to strengthen your communication and interview skills
- The opportunity to work towards a certificate
- A minimum of three courses from any healthcare streams
- One communications course
- An optional work placement
- One job search course

Long-term Care and Ethics in Healthcare

- ❑ CHSM 301 The Healthcare Systems
- ❑ CHSM 307 Principles of Long Term Care Service Del.
- ❑ CPHL 302 Ethics and Health Care
- ❑ CINT 901 Gerontology: Critical Issues and Future Trends

Health Research/Data Analytics in Healthcare

- ❑ CHSM 301 The Healthcare Systems
- ❑ CHIM 301 Healthcare Information Analysis
- ❑ CHIM 305 Introduction to Health Informatics
- ❑ CHIM 408 Statistics for Health Services Managers

Health Administration

- ❑ CHSM 301 The Healthcare Systems
- ❑ CLAW 122 Business Law
- ❑ CLAW 402 Health Information Access and Privacy
- ❑ CHIM 303 Intro to Health Coding Classification
- ❑ CHSM 437 Human Resources Management in Healthcare

Communications

- ❑ CDCE 400 Exploring Leadership Skills
- ❑ CCMN 279 Introduction to Professional Communication

Job Search and Placement Preparation

- ❑ CDCE 600 Job Search Strategies

Course Series Requirements

Note: CHSM 301 is a prerequisite for CHIM 301 and CHIM 303 and CLAW 122 is a prerequisite for CLAW 402.

Full Stack Developer

Accelerate or start your career in full stack development and get noticed by employers. The Canadian labour force is experiencing a shortage of tech talent at the same time that employers are in immediate need of them.* Between 2022 and 2028, the expected number of job openings for full stack developers alone — not including associated developer roles — is almost 11,000.** Our fully online, flexible Course Series in Full Stack Developer that can be completed in a single term is a fast track route for aspiring developers to sharpen their technical and data analysis skills to be competitive in the job market.

If you have more time and are looking for professional development skills, like project management and professional communication, both of which are critical to career advancement, then the Certificate in Full Stack Developer might be an option for you. You will be able to apply the completed courses in the course series towards the certificate.

Career-Ready Support Offered

While enrolled in the Course Series in Full Stack Developer, you will receive a variety of support, including:

- Virtual mentor services: the virtual mentor is available free of charge while taking courses for 1-on-1 Zoom meetings and for consultations by email about the coursework, assignments, final projects, and for career advising.
- Employer networking support: participating employers will provide informal career and networking support through LinkedIn.
- Career support: full stack developer job search and career advising sessions will be offered throughout your courses.

Industry and Careers

This course series can lead to career paths in roles such as:

- Consultant (finance, healthcare, government, IT, among other industries)
- Full stack developer
- Start up and small-to-medium business owner/manager
- Web apps developer
- Website developer
- Web services developer

Who Should Take This Course Series?

- Individuals looking to make a career pivot by adding specialized skill sets for moving up in their careers
- High school diploma holders and university and college undergraduate degree recipients
- New Canadians looking for Canadian credentials to help them enter the job market
- Employers in small, medium and large sized businesses who need to send their staff to upskill in full stack cloud developer coding and scripting capacities in potential candidates

This course series is also applicable to working professionals who are:

- Aspiring coders, web, and software developers
- Looking to upskill and require new technical skills to stay current in their jobs
- Working in a career that requires a computer science or STEM university-level credential
- Returning to the workforce or preparing to switch careers and need a university credential to demonstrate readiness for today's technical professional roles in a range of fields

Required Courses

- ☐ CKCS 145 **Full Stack Developer**
- ☐ CKCS 149 **Python Programming**

Course Series Requirements

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

The two-course series is flexible in that no courses have prerequisites; continuous learners may take the courses in any order and in combination, or "fast track" their learning by taking all two courses concurrently in the same semester.

Those who successfully complete this course series are eligible to earn a Professional Development Award from The G. Raymond Chang School of Continuing Education. Once you have successfully completed the courses, submit the Request for Professional Development Award (PDA) form with your name, student number, and the course series you have completed. Upon verification, you will receive your professional development award within 4 to 6 weeks.

Full Stack Developer

What Will You Learn?

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

- Construct fully functional websites and mobile applications, from end-to-end, by using various languages and tools
- Front-end development and production: create and customize responsive web pages using a variety of languages (SQL, JavaScript) and full stack developers' tools (Git, GitHub, Unix Shell)
- Back-end development and deployment: design a dynamic database/data store for retrieval of data using SQL and embed SQL statements in Python code that is supporting the middleware.
- Effectively leverage middleware to achieve web development project goals: architect the middleware in Python with support libraries, such as Flask from Pallets Project
- Perform Beta testing for full stack website related product improvement: leverage tools, libraries, apps and various software to perform a number of tiered, technical activities required to deliver a polished end-to-end website or mobile application