#### Archived Calendar

### **Course Series**

2022-2023

3-D Printing, Visualization, and Agile Product Prototyping

American Sign Language (ASL)

Applied Analytics and Statistics for 21st

Century Decision-Making

Architectural Preservation

Architectural Technologists Professional Career

Foundations

Blockchain for Business

Caring Clown

CATIA Engineering Design

Children's Publishing

Coding, Programming, and Algorithms: Computer Science Fundamentals

Colour Management Systems

Computer Programming for Game Developers

Creative Photography

Creative Writing

Cybersecurity

Early Childhood Mental Health and Well-Being

EarlyON Child and Family Centres

Entrepreneurship and Small Business

Film Production Techniques Using Mobile Devices

Financial Predictive Data Analytics

Fine Art Practice

Full Stack Developer NEW

Gender and Sexuality

Health Ethics

Health Informatics

Health Services Management

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

Intercultural Communication in the Canadian Workplace (ICCW)

Interdisciplinary Conflict Resolution

and Team Building

Internationally Trained Health Professionals (ITHP) bridging program (formerly ITMD - Internationally Trained Medical

Doctors program)

Introduction to Health Data Analytics

Introduction to Privacy, Access, and Information

Management

Introductory Accounting

Leadership in Accessibility and Inclusion

Marketing Innovation

Marketing Research

Paediatric Health Assessment

Patient Safety and Nursing Informatics

Professional Healthcare Careers Foundations

Project and Workplace Budgets Coordination

Project Management

Research Methodologies and

Program Evaluation

Retail Buying

Retail Operations and Sales Management

Science, Technology, Engineering,

and Mathematics (STEM)

Scientific Research Policy and Ethics

Social Media Marketing

Social Media Practices and Reputation Management

The Human Body

The Internet of Things (IoT)

Toy Invention

Website Design

Workplace Communication in Canada (WCC)

Workplace Mental Health in Healthcare Settings

# 3-D Printing, Visualization, and 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.

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.

#### 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.

# 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.

No previous background is required.

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.

#### 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
	CASL 201 CASL 301

#### **Course Series Requirements**

· Successful completion of 2 required courses

# **Applied Analytics and** 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.

#### 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.

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

#### Required Courses (Option 2)

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

□ CIND 123 Data Analytics: Basic Methods CQMS 210 Applied Statistics for Business

#### **Course Series Requirements**

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

· Successful completion of courses in Option 1 (CIND 123, (CMTH 304 or CMTH 380), and CMTH 404)

· Successful completion of courses in Option 2 (CIND 123, and CQMS 210)

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

### **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

# **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
- Computer-Aided Architectural Drawing
- □ CKAR 310 Materials and Methods
- ☐ CKAR 500 Sustainable Buildings

#### **Course Series Requirements**

· Successful completion of 4 required courses

### **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.

#### **Required Courses**

CZIT 200 **Blockchain Architecture and Applications** 

Blockchain: Risk Management

#### Course Series Requirements

· Successful completion of 2 required courses

# **Caring Clown**

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 I

☐ CSCC 910 Caring Clown II

Caring Clown Practicum

#### **Course Series Requirements**

· Successful completion of 3 required courses

# **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 3 required courses

# Children's Publishing

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
- Mktg Books for Children and Teens

#### **Course Series Requirements**

· Successful completion of 4 required courses

# Coding, Programming, and 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.

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

# 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 handson 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 Colour Management - Printing ☐ CDGA 130 Colour Management - Packaging

#### **Course Series Requirements**

· Successful completion of 3 required courses

# Computer Programming for Game Developers

This program teaches 3-D Unity and Autodesk's Maya (in a computer lab) to equip students with the programming and scripting skills set to develop, on server-based and mobile devices, a range of commercial and serious games such as video games, learning games, "training interactive", and augmented reality simulations and applications. The projectcentred approach provides hands-on engaging computer programming application and game development that are closely analogous to work projects that the students will experience in their real-world work as game developers.

#### **Required Courses**

☐ CKCS 170 C++ and CSharp.net for Game Dev

Math for Game Dev Design Game Mechanics for Game Dev

#### **Course Series Requirements**

· Successful completion of 3 required courses

# **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.

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

#### Course Series Requirements

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

# **Creative Writing**

Welcome to the writing life at The Chang School!

Have you been holding on to an idea for a story for a long time? Have you wanted to develop a writing practice but don't know where to start? Maybe you already have a project on the go, but want to know how to take it to the next stage in its development.

Our goal is to jump-start your creativity and guide you through the craft of writing in various genres. Classes are small and students quickly form a community of emerging writers. Whether you are getting your feet wet with a beginner's course or making the final touches on your novel, we have a course to fit your needs.

Creative writing is both a craft and an art. Workshops allow students to dip a toe into the world of imaginative writing and then continue with more advanced workshops in a variety of genres.

We welcome beginners and advanced writers, and everyone in between.

#### What You Can Expect

- · Small classes with a hands-on approach: From the first class, you'll roll up your sleeves and start writing.
- · Constructive and supportive feedback on your work: Our courses feature lively, useful discussions on matters of craft and finding your voice.
- Tips on how to get published: Many of our students have published their work in journals, newspapers, magazines, and books.
- Expert, award-winning instructors: Visit our Instructor Profile Directory to read instructor biographies.

#### 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 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 514 Works In Progress: One-On-One

Creative Writing Workshop

#### **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.

#### Format

Each of our ten-week courses is made up of ten modules. In each module, we work together on a new aspect of the writing craft. There is no long lecture to read. Instead, the module offers thinking points and discussion points, followed by an exercise. You respond online, your classmates read what you say/write and respond to it, and the instructor gives feedback. There is a short homework assignment each week.

In ten weeks, we cover all the key elements of the genre. In addition, we invite an online guest (publisher/editor) who will answer your questions about the world of publishing and editing.

#### Participation and Sense of Community

You are expected to comment on the assignments of others, and in turn, they (and the instructor) will comment on and critique your posted work. The atmosphere is good-humoured and collegial, and there is no shortage of jokes and off-the-cuff observations, just as there would be in an earthbound classroom. In the final modules, you will have a chance to post a full draft of a story or travel article.

### **Creative Writing**

#### Earn a Professional Development Award in Creative Writing

Creative Writing workshops are non-credit, but students who successfully complete a minimum of three courses, totalling a minimum of 60 hours, are eligible to earn a Professional Development Award from The Chang School. You can also take more than three courses if you wish.

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

## 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 opensource 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

#### **Required Courses**

☐ CKDF 110 Computer Network Security

☐ CKDF 130 Digital Forensics Systems

#### Course Series Requirements

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

# **Early Childhood Mental** Health and 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.

No previous background is required.

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.

#### **Required Courses**

☐ CCLD 342 Assessment for Programming

#### Electives (select 2)

- ☐ CCLD 442 Infant Mental Health
- Therapies for Young Children ☐ CCLD 444
- ☐ 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, CCLD 446
- · Professional Practice: CCLD 442, CCLD 445

# **EarlyON Child** and 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**

☐ CVFS 401 Contemporary Family Issues

☐ CVFS 403 Family Supports Theory and Practice

#### **Electives (select 1)**

☐ CVFS 406 Guiding Children's Development

Program Planning and Evaluation Strategies

#### **Course Series Requirements**

· Successful completion of 2 required courses

· Successful completion of 1 elective

## **Entrepreneurship** and 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**

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

# Film Production Techniques **Using Mobile Devices**

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

# 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 Courses**

☐ CMTH 501 Numerical Analysis I

#### **Electives (select 2)**

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

#### **Course Series Requirements**

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

### 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, the Certificate in Image Arts, or the Certificate in Fashion Coordination and Styling
- · Apply for merit-based awards

#### Required Courses (select 3)

- ☐ CDFA 104 Fashion Drawing I
- □ CDID 170 Drafting for Entertainment
- ☐ CFPN 534 Graphic Design
- **Animation Practices**
- CMPC 101 Visual Studies I
- ☐ CMPC 103 Reframing Art History
- ☐ CMPC 203 Art in the Modern World

#### Course Series Requirements

· Successful completion of 3 required courses

## 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

#### **Required Courses**

□ CKCS 145 Full Stack Developer

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.

#### Admission Criteria

Recommended:

· Ontario Secondary School Diploma (OSSD) or equivalent OR

· Mature student status

\*Randstad

\*\*Government of Canada

### **Full Stack 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

#### 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

# Gender and 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

#### Electives (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
- ☐ CSOC 885 Women and Islam

#### **Course Series Requirements**

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

### **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

### **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

# 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

# Inclusive Media: Real-time Closed Captioning and 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)

☐ CDIM 100 Inclusive Media and Regulations ☐ CDIM 101 Respeaking for Live Captioning □ CDIM 102 Audio Description ☐ CDIM 103 Advanced CC and Intro to NER □ CDIM 104 Audio Description Advanced

#### **Course Series Requirements**

· Successful completion of 4 required courses

# Intercultural Communication in the Canadian Workplace (ICCW)

The Intercultural Communication in the Canadian Workplace (ICCW) course series is offered by the Workplace Communication in Canada (WCC) Program.

The WCC Program offers on- and off-campus courses designed to help internationally and Canadian-trained individuals develop the intercultural communication and soft skills necessary for meaningful employment and career mobility in the Canadian labour market.

#### **Required Courses**

□ CDCE 305 Intro to Intercultural Communication Managing Workplace Relationships Wking with Culturally Diverse Clients ☐ CDCE 308 Cross Cultural Teamwork

#### **Course Series Requirements**

· Successful completion of 4 required courses

# Interdisciplinary Conflict Resolution and 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

Team Work for Community Services

#### **Electives (select 1)**

☐ CINT 920 Community Collaborations

Writing Bodies Differently

☐ CSWP 935 Engaging Diverse Communities

#### Course Series Requirements

· Successful completion of 2 required course

· Successful completion of 1 elective

### 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:

- 1. Long-term Care and Ethics in Healthcare
- 2. Health Research/Data Analytics in Healthcare/ Health Informatics
- 3. 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
- Health and nutrition advisor
- · Health services coordinator
- · Health services scheduling coordinator
- Hospital administrator
- Medical associate
- · Patient services representative
- · Public health specialist
- Research assistant/associate

#### 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
- 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 & Placement Preparation**

□ CDCE 600 Job Search Strategies

#### Course Series Requirements

- · A minimum of three courses from any healthcare streams
- One communications course
- · An optional work placement
- · One job search course

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

# Internationally Trained Health Professionals (ITHP) bridging program (formerly ITMD - Internationally Trained Medical Doctors program)

#### 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

# 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
- Statistics for Health Services Managers
- ☐ CHSM 301 The Healthcare Systems

#### **Course Series Requirements**

· Successful completion of 3 required courses

# Introduction to Privacy, Access, and 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

Data and Info. Mgmt for Privacy

□ CZLW 327 Privacy By Design

#### **Course Series Requirements**

· Successful completion of 3 required courses

# Introductory Accounting

This course series provides students interested in developing accounting skills with essential introductory accounting knowledge.

### **Required Courses (Option 1)**

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

☐ CACC 110 Financial Accounting ☐ CACC 410 Management Accounting

## Required Courses (Option 2)

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

☐ CACC 100 Introductory Financial Accounting ☐ CACC 333 Core Concepts of Accounting

☐ CACC 406 Introductory Management Accounting

### **Course Series Requirements**

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

· Successful completion of courses in Option 1 (CACC 110 and CACC 410)

OR

· Successful completion of courses in Option 2 (CACC 100, CACC 333, and CACC 406)

## Leadership in Accessibility and Inclusion

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 handson experience as you build your personal network in the community.

This course series can be completed entirely online.

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.

### **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

## **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 and the New Media
- ☐ CMKT 730 Assessing/Managing Market Opportunities

## **Electives (select 1)**

- ☐ CMKT 500 Marketing Research
- ☐ CMKT 510 Innovations in Marketing
- ☐ 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

# 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 and the New Media
- ☐ CMKT 500 Marketing Research
- ☐ CMKT 700 Business Intelligence/Decision Modeling

### **Course Series Requirements**

· Successful completion of 3 required courses

## 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-theart SickKids Simulation Lab.

### **Required Courses**

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

## **Course Series Requirements**

· Successful completion of 2 required courses

# Patient Safety and **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 (select 2)

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

### Course Series Requirements

· Successful completion of 2 required courses

## **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)

Please Note: If you wish to pursue CKCH 113, you must also select CKCH 107 as together these courses are equivalent to CHY 113. If you wish to pursue CKCH 142, you must also select CKCH 143 as together these courses are equivalent to CHY 142.

If you wish to pursue CKCH 225, you must also select CKCH 227 as together these courses are equivalent to BCH 261.

 ,	
CBLG 101	Anatomy and Physiology I
CBLG 111	Anatomy and Physiology II
CBLG 143	Biology I
CBLG 144	Biology II
CBLG 151	Microbiology I
CBLG 311	Cell Biology
CCHY 103	General Chemistry I
CCHY 242	Organic Chemistry II
CCHY 381	Physical Chemistry I
CKCH 107	General Chemistry Laboratory
CKCH 113	General Chemistry II
CKCH 142	Organic Chemistry I
CKCH 143	Organic Chemistry Laboratory
CKCH 225	Biochemistry I
CKCH 227	Biochemistry Laboratory 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 and Statistics I
CMTH 310	Calculus and Computational Methods II
CMTH 404	Probability and Statistics II
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, CKCH 107, CKCH 113, CKCH 142, CKCH 143, CKCH 225, CKCH 227

# **Project and 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

# **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

## **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:

Fundamentals of Project Management

### 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

# Research Methodologies and Program Evaluation

This program offers an introduction to quantitative and qualitative research methodologies from anti-oppression, anticolonial, 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

## **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

# Retail Operations and 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

# Science, Technology, Engineering, and Mathematics (STEM)

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**

CDCE 305	Intro to Intercultural Communication
CDCE 306	Managing Workplace Relationships
CDCE 307	Wking with Culturally Diverse Clients
CDCE 308	Cross Cultural Teamwork
CENT 500	New Venture Startup
<b>CENT 526</b>	Entrepreneurial Behaviour and Strategy
CENT 601	Identifying Opportunities

### Electives (select 2)

☐ 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 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 107	General Chemistry Laboratory
☐ CKCH 113	General Chemistry II
☐ CKCH 143	•
☐ CKCH 142	
☐ CKCH 216	Analytical Chemistry I
☐ CKCH 217	Analytical Chemistry Laboratory I
☐ CKCH 223	Analytical Chemistry II
□ CKCH 224	Analytical Chemistry Laboratory II
□ CKCH 227	Biochemistry Laboratory I
☐ 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)
☐ CKES 120	Environmental and Atmospheric Processes
☐ CKES 170	Water Treatment

List of Electives continued on following page.

## Science, Technology, Engineering, and Mathematics (STEM)

### **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 183, CCHY 242, CCHY 381, CCHY 583, CKCH 107, CKCH 113, CKCH 142, CKCH 143, CKCH 216, CKCH 217, CKCH 223, CKCH 224, CKCH 227, CKES 190, CPCS 111, CPCS 120, CPCS 130, CPCS 181, CPCS 182, **CPCS 581** 

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.

### **Electives (select 2)**

☐ CKES 180	Site Assessment
☐ CKES 190	Renewable Energy and Green Technology
☐ CKES 210	Applied Environmental Analysis
☐ CKES 220	Environmental Law and Practice
□ 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 and Statistics I
□ CMTH 404	Probability and Statistics II
☐ CMTH 500	Introduction to Stochastic Processes
☐ CMTH 501	Numerical Analysis I
□ CMTH 600	Computational Methods In Mathematics
☐ CMTH 642	Data Analytics: Advanced Methods
☐ CMTH 700	Financial Mathematics I
□ CMTH 800	Financial Mathematics II
□ CPCS 111	Physics in the News
☐ CPCS 120	Physics I
☐ CPCS 130	Physics II
☐ CPCS 181	Introduction to Astronomy
☐ CPCS 182	Life in the Milky Way Galaxy
☐ CPCS 581	Advanced Topics in Astronomy
☐ CSCI 130	Mobile Robotic Devices Embedded Systems
☐ CSCI 230	Emergency Management Practice
□ CSCI 232	Incident and Operations Management
☐ CSCI 234	Analysis of Critical Incidents
☐ CSCI 241	Planning for Emergency Management
CSCI 243	Continuity and Risk Management

## Scientific Research Policy and 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

# 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 and the New Media
- ☐ CMKT 510 Innovations in Marketing

## **Course Series Requirements**

· Successful completion of 3 required courses

# Social Media Practices and 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

## 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**

CBLG 10A is a multi-term course. If you enrol in CBLG 10A for the selected term, you will automatically be enrolled in CBLG 10B 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.

☐ CKBG 100 Human Body Health Tools □ CKBG 110 The Science of Food Foundations ☐ CKBG 115 The Science of Supplements

### **Course Series Requirements**

· Successful completion of 4 required courses

## 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 Interenet 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

## Toy Invention

Are you interested in toy invention and looking for hands-on learning and guidance from industry experts like Spin Master?

Our Course Series in Toy Invention will give you the knowledge and skills needed to pitch toy concepts to professional toy companies. Learn how to prototype a toy concept, test your concept, and then get direct feedback from industry professionals. You'll walk away with a portfolio displaying your toy ideas and newly acquired presentation skills, including a complete prototype and a video you created to promote your toy.

### Industry and Careers

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

- Toy inventor
- · Toy and games inventor
- · Toy entrepreneur

### Who Should Take This Course Series?

Playful, open-minded makers interested in pursuing a career in toy invention. Our learners come from a variety of diverse backgrounds, including - but not limited to education, psychology, storytelling, design (industrial, graphic, etc.), engineering (mechanical, industrial, etc.), and other technology fields.

### What Will You Learn?

This program is highly experiential and project-based, and it will include in-studio learning as you progress through different stages of the toy concept development process.

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

- · Identify the principles of toy invention and elements of
- · Apply creative tools and methods to find novel ideas for toys.
- · Prototype toy concepts.
- · Conduct market research.
- · Identify the relevant intellectual property protections required for a toy invention.
- · Successfully communicate new toy concepts verbally, in print, and in video.

### **Required Course**

☐ CDTI 100 Principles of Toy Invention

□ CDTI 110

☐ CDTI 120 The Business Side of Toys - Talk Series

☐ CDTI 130 Toy Bootcamp

### **Course Series Requirements**

· Successful completion of 4 required courses

This course series is cohort-based; all participants will move through the completion of the four required courses as a group. You should be prepared to commit to completing the entire course series, which will take place over one academic year (Fall and Winter terms). CDTI 100 and CDTI 110 will take place in the Fall term, and CDTI 120 and CDTI 130 will take place in the Winter term.

## Website Design

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**

☐ CEID 100 Digital Skills: Int'l Innovation

Graphic Design

☐ CFPN 535 User Experience Design

☐ CFPN 542 Design for Mobile Devices

### **Course Series Requirements**

· Successful completion of 3 required courses

# **Workplace Communication** in Canada (WCC)

Established in 2007, the Workplace Communication in Canada (WCC) Program provides exceptional intercultural communication and soft skills training. The WCC program helps professionals in the Canadian workplace to enhance awareness and understanding of cultural differences in communication. This can result in better utilization of diverse talent and increased productivity for today's global workplace.

The program's goal is to maximize the employability and leverage preparedness for professional bridging programs of internationally educated professionals by implementing the following:

- · a competency-based curriculum (using detailed performance indicators)
- a workplace-focused curriculum (materials developed in partnership with pan-professional and subject-matter experts)
- · an experiential curriculum (using role plays, simulations with actors, workplace scenarios, debate clubs, and group work)

### Required Courses (select 4)

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

### **Course Series Requirements**

· Successful completion of 4 required courses

# 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 (select 2)

- □ CVOH 110 Promote Frontline Worker Mental Health
- Support Frontline Worker Mental Health

### **Course Series Requirements**

· Successful completion of 2 required courses