Archived Calendar
Certificate Programs

2024-2025

Toronto Metropolitan University

The Chang School of Continuing Education

ADVANCED ACCOUNTING

Certificate can be completed online.

Delivery	Online
Exam	In person
Courses	5
Length	1.5 to 2 years
Cost	$3,100–$3,200

TAKE THE FINAL STEP IN YOUR CPA PREP WITH AN ADVANCED ACCOUNTING CERTIFICATE

You've made it to the final accounting certificate in The Chang School four-part Accounting Certificate Series. This series includes:
- Level 1: Certificate in Foundations for Accounting
- Level 2: Certificate in Intermediate Accounting I
- Level 3: Certificate in Intermediate Accounting II
- Level 4: Certificate in Advanced Accounting

Our Accounting Certificate Series offers in-depth skills training and hands-on experience to help you master those CPA enabling competencies and give you the best possible start in your accounting certification and CPA career. (Not sure if you want to go the CPA route quite yet? This certificate will set you up for success in any career that requires in-depth accounting knowledge.)The accounting courses in the Certificate in Advanced Accounting qualify as preparatory courses for the
CPA Professional Education Program (PEP). Once you complete all four accounting certificates, you can apply for the CPA PEP. And, after you complete the PEP, you'll be eligible to write the three-day Common Final Examination (CFE) exam.

It's time to level up your skills with a Level 4: Certificate in Advanced Accounting. The CPA courses in this certificate will give you a comprehensive education in advanced accounting and teach you how to expand accounting applications to a wide variety of business and financial settings, and apply tax concepts to many different situations.

You'll learn about auditing and gain cutting-edge knowledge in the growing field of information systems auditing and data analytics. Our accounting courses will also give you crucial expertise in taxation and strategic management.

Once you complete the Certificate in Advanced Accounting, you'll be able to apply to intermediate or more senior-level jobs that require an accounting certificate from a post-secondary institution.

The world needs more qualified CPAs now more than ever: are you ready to join their ranks at last?

Who should take this Advanced Accounting certificate?
- You're a working professional with the goal of pivoting your career into accounting or finance and want to do accounting courses online
- You're a college or university graduate in a non-accounting field who wants to pursue the CPA designation
- You're a newcomer to Canada who needs to take some accounting courses in Canada to build your Canadian resume and help secure a job
- You're a business owner or manager who wants to enhance your accounting knowledge

What will you learn while taking the Advanced Accounting certificate?
You'll get:
- Key CPA skills, such as financial reporting, audit and assurance, taxation, management, and governance and data analytics and information systems
- The ability to evaluate accounting and reporting methods and examine audit processes
- A detailed overview of the federal income-tax laws concerning income and taxes payable of individuals, corporations, and trusts, as well as practical tax planning considerations
- An understanding of tax compliance obligations
- Analytical skills to evaluate accounting and reporting methods
- Six courses accredited by the CPA and count towards the association's PEP prerequisite

Note: There has been a recent curriculum change. If you registered in the certificate prior to July 2, 2023, you can find curriculum details of your year of registration at the archived calendar. If you're considering following the revised curriculum and would like help in reviewing your options, reach out to our Client Services team at ce@torontomu.ca.

Certificate Requirements

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

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

Completion of Levels 1 to 3 in the Accounting Certificate Series.

Admission Criteria

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

OR
- Mature student status

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

Financial Support

Awards and Bursaries
The Chang School offers both merit-based awards and need-based financial aid.

Ontario Student Assistance Program (OSAP)
This certificate program is OSAP-eligible. To learn more, visit the Student Financial Assistance website.

Questions?
Contact Client Services ce@torontomu.ca

Required Courses

- CACC 521   Auditing
- CACC 696   Information Systems Audit + Data Analytics
- CACC 703   Advanced Financial Accounting
- CACC 750   Taxation
- CBUS 800   Strategic Management

ADVANCED HUMAN RESOURCES MANAGEMENT

Certificate can be completed online.

Delivery	Online
Courses	4
Length	1 to 1.5 years
Cost	$3,100–$3,400

CREATE BETTER WORKPLACES WITH AN ADVANCED HUMAN RESOURCES MANAGEMENT POSTGRADUATE CERTIFICATE

Are you ready to take your human resources (HR) career to the next level? The Chang School Postgraduate Certificate in Advanced Human Resources Management gives you the in-demand experience and education to help you excel in senior HR management – and gain the confidence and skills you need to become an effective and innovative leader.

This program provides the must-have knowledge and advanced HR management (HRM) skills you'll need, like HR planning, labour relations, compensation, and learning and development. Our HR courses can also help you get started on the path towards the Human Resources Professionals Association (HRPA) Certified Human Resources Professional (CHRP) designation or Certified Human Resources Leader (CHRL) designation.Our program is set up to make it easy to complete while working full-time, and you can finish this HR management certificate in as little as eight months, so you can maximize your senior HR opportunities, faster. Designed with industry professionals, everything you'll learn is 100% practical – and based on the day-to-day real-world issues you'll tackle in your career, just like they have. Plus, access to our leading industry experts and engagement time with your fellow learners means you'll be able to start building your professional network as soon as you start your courses.

Once you complete the advanced HR management certificate, you can enhance your career in fields like change management and organizational transformation, compensation, benefits and total rewards; equity, diversity and inclusion; labour relations and union negotiations; learning and development; organizational development and culture; and talent management and workforce planning.

Start your advanced human resources program today and begin building the leadership confidence you need to take advantage of all the higher-level HR opportunities that'll be coming your way soon.

Who should take this Advanced Human Resources Management postgraduate certificate?
- You're an HR professional who wants to build your confidence, validate your existing skills and upgrade your professional toolkit for your next career step
- You're an HR professional who wants to obtain your CHRP or CHRL designation
- You're not working in HR but would like to embark on a new career
- You're an internationally educated professional who requires Canadian-focused HR knowledge and a Canadian credential to enhance your employability
- You're working in a business role and require further education to pivot to a specialty in HR
- You're a manager taking on new responsibilities, or a small business owner who's overseeing aspects of HR for your business

What will you learn while taking the Advanced Human Resources Management postgraduate certificate?
You'll learn how to:
- Develop strategic HR plans that effectively respond to organizational changes
- Design competitive compensation strategies that reflect organizational goals, pay equity standards, and labour market trends
- Analyze and navigate labour relations by understanding the collective bargaining process, union dynamics, and alternative dispute resolution methods
- Integrate ethical and legal considerations in HR practices, ensuring compliance with labour laws and creating fair, transparent policies
- Assess learning and development needs and identify solutions aligned with organizational objectives by utilizing adult learning principles, needs assessments, and evaluation models

ADVANCED HUMAN RESOURCES MANAGEMENT

Certificate Requirements

- Four required courses

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

Admission Criteria

- Undergraduate degree or a combination of equivalent professional experience and education

For complete details, check Curriculum Advising.

Note: This certificate is not post-graduation work permit (PGWP) eligible.

Required Courses

- ❑ CYPG 650 Human Resources Planning
- ❑ CYPG 651 Labour Relations
- ❑ CYPG 652 Compensation
- ❑ CYPG 653 Learning & Development

ADVANCED ENTERPRISE ARCHITECTURE & INFRASTRUCTURE MANAGEMENT

Certificate can be completed online.

Delivery	Online
Exam	In person
Courses	4
Length	8 months to 1.5 years
Cost	$2,800–$3,100

RISE TO THE TOP OF THE IT INDUSTRY WITH AN ADVANCED ENTERPRISE ARCHITECTURE AND INFRASTRUCTURE MANAGEMENT CERTIFICATE

Want to get into the lucrative information technology (IT) field? Enterprise architects are some of the most well-paid IT professionals in the industry. And a Certificate in Advanced Enterprise Architecture and Infrastructure Management from The Chang School is the perfect tool to accelerate your career in this fast-growing field.

Companies need enterprise architects to streamline their organizational processes and solve their business problems via smart IT architecture and infrastructure. They also need professionals who can enhance their computer and network security to protect their most precious data assets. Can you help organizations figure out how to achieve their business goals? This enterprise architecture certificate will give you this expertise.The enterprise architecture training covers areas like business process management, and IT security and privacy. We also offer a wide variety of different enterprise architecture courses to help boost your credentials. You can increase your experience in subjects like supply chain process architecture or data communications network design, or train in cloud computing. Want to take on more of a management role? Project management training is also available.

Our IT architecture certification offers both online and classroom learning so you can customize your education to your schedule and learning style. You can also finish your IT architecture training in as little as eight months.

Companies need talented enterprise architects and infrastructure managers. Join them today and start a career with an enterprise architecture certificate and endless opportunity.

Who should take this Advanced Enterprise Architecture and Infrastructure Management certificate?
- You're a graduate in engineering or IT, or have an MBA or The Chang School's Certificate in Information Systems Management and want to develop a specialty in Enterprise Architecture
- You're a professional currently working in business analytics, database development, engineering, network or security administration, or software development and want to pursue a specialized role in enterprise architecture

What will you learn while taking the Advanced Enterprise Architecture and Infrastructure Management certificate?
You'll learn how to:
- Advise organizations on how to respond to emerging technologies and the growing complexity of information systems
- Develop and manage information technology architecture and infrastructure to meet the strategic needs of business and government
- Analyze and solve business problems by applying information technology architecture and infrastructure
- Understand the context of enterprise architecture frameworks, including:
  - the open group architecture framework (TOGAF)
  - service-oriented architecture (SOA)
  - control objectives for information and related technologies (COBIT)
  - Zachman

Certificate Requirements

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

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

Admission Criteria

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

AND
- All of the following courses or equivalents:
  - CITM 100 or CITM 102
  - CITM 207
  - CITM 301

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising

Financial Support

Awards and Bursaries
The Chang School offers both merit-based awards and need-based financial aid.

Ontario Student Assistance Program (OSAP)
This certificate program is OSAP-eligible. To learn more, visit the Student Financial Assistance website.

Questions?
Contact Client Services ce@torontomu.ca

Required Courses

- ☐ CITM 410   Business Process Design
- ☐ CITM 706   Enterprise Architecture
- ☐ CITM 820   Information Systems Security and Privacy

Electives (select 1)

- ☐ CITM 330   Supply Chain Process Architecture
- ☐ CITM 600   Data Communications Network Design
- ☐ CITM 711   Cloud Computing
- ☐ CITM 750   IS Project Management

ADVANCED INTERNATIONAL TRADE MANAGEMENT

Includes online and in-person courses.

Delivery	Hybrid
Courses	5
Length	1.5 to 2 years
Cost	$2,900–$3,000

BECOME A MASTER OF TRADE MANAGEMENT WITH AN ADVANCED INTERNATIONAL TRADE MANAGEMENT CERTIFICATE

Looking for a career in an industry bursting with opportunity? One in six jobs in Canada are related to the import-export business. That means there's always great demand for trade management professionals. The Chang School's Certificate in Advanced International Trade Management will give you the hands-on learning and sought-after skills you need to flourish in this always-hiring industry.

International trade agreements can be quite complex, but the Advanced International Trade Management certificate sets you up for success with a rich curriculum focused on the current international trade environment and import-export courses featuring real-world examples from all over the globe.You'll deepen your international expertise with coursework in international trade and management of international enterprise, and develop the analytical skills you need to assess business risk in international transactions. We prioritize ethical trade management, so you'll also master the ethics, regulations, and legal aspects of international business so you can practice ethical leadership in the field.

Want to broaden your advanced international trade management skill set? Our international trade courses can help you fill your resumé with in-demand skills like project management, and give you complementary knowledge in fields like microeconomics, the global business environment, and business law.

You can finish most of these advanced international trade courses completely online, giving you the flexibility to balance learning with your work and family obligations.

Then, once you're completed your Advanced International Trade Management certificate, you'll be ready for a rewarding career in global trade management.

Let's get started!

Who should take this Advanced International Trade Management certificate?
- You want to want to advance your knowledge after completing the Certificate in Foundations of International Management
- You're a working professional in either the private or public sector who needs specialized expertise in international trade or the import-export business
- You're an owner, manager, or employee of an enterprise that conducts business across borders

What will you learn while taking the Business Decision Analysis certificate?
You'll learn how to:
- Utilize analytical skills to mitigate financial and political risk when conducting international business transactions
- Understand how international trade agreements and international institutions influence the sale of products and services across borders
- Recognize the meaning and importance of ethical leadership in dealing with government regulations, customers, and employees
- Appreciate the role of the export manager in areas, including:
  - export pricing
  - documentation
  - shipping
  - insurance
  - sourcing export promotion assistance

ADVANCED ENTERPRISE ARCHITECTURE & INFRASTRUCTURE MANAGEMENT

Certificate Requirements

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

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

Admission Criteria

Recommended:
- Certificate in Foundations of International Management or equivalent

AND
- All of the following courses or equivalents:
  - CGMS 200
  - CGMS 401
  - CQMS 102

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Required Courses

- ❑ CGMS 723   International Trade
- ❑ CGMS 724   Management of International Enterprise
- ❑ CGMS 802   Ethics and Regulation of Int'l Bus

Electives (select 2)

- ❑ CECN 104   Introductory Microeconomics
- ❑ CGMS 400   The Global Business Environment
- ❑ CGMS 450   Project Management
- ❑ CLAW 122   Business Law
- ❑ CLAW 724   Legal Aspects of International Business

ADVANCED SAFETY MANAGEMENT

Certificate can be completed online.

Delivery	Online
Courses	8
Length	2.5 years
Cost	$5,000–$5,800

BUILD A SAFER WORLD WITH AN ADVANCED SAFETY MANAGEMENT CERTIFICATE

Organizations need more occupational health and safety leaders. And we want to help you become one of those leaders. The Chang School Certificate in Advanced Safety Management will give you the skills and education you need to take on mid-management positions and thrive.

This health and safety program offers more in-depth knowledge that can help you thrive in your career. Our occupational health and safety online courses cover areas like accident theory, ergonomics, safety evaluation techniques, safety control methods, and fire and radiation safety. You can also train to become a more well-rounded professional with courses in subjects like disability issues and conflict resolution in community services.There are many opportunities in this booming sector. Every workplace in Ontario with more than five employees is legally required to plan and put into practice an OHS policy, and almost all industries need trained OHS professionals. Expand your health and safety knowledge of health and enjoy exploring mid-career roles with more responsibilities or being a team lead.

Courses can all be completed online, in any order, so you can learn at your own pace. Plus, if you complete this occupational health program after the Certificate in Occupational Health and Safety Leadership, you'll meet the educational requirements to write the Board of Canadian Registered Safety Professionals (BCRSP) exam to become a Canadian Registered Safety Professional (CRSP).

Excited to build your health and safety management knowledge and head to the top of your field? Start this certificate with us today.

Want to learn more about other occupational health and safety programs at The Chang School? Check out our Occupational Health and Safety certificate series.

Who should take this Advanced Safety Management certificate?
- You're a graduate of our Certificate in Occupational Health and Safety or equivalent and want to build on your knowledge base
- You're an early-career occupational health and safety practitioner and are looking to move up in your career
- You want to take on a team-lead role within the OHS department of your organization

What will you learn while taking the Advanced Safety Management certificate?

You'll learn how to:
- Apply accident theory and analysis
- Advise on ergonomic issues
- Implement safety evaluations and control techniques
- Execute OHS practices in a variety of workplace contexts, including construction, health care facilities, retail outlets, offices, utilities, forestry, and mining
- Manage fire and radiation safety

Note: Effective July 1, 2024, the curriculum for the certificate in Advanced Safety Management has been updated.

Learners who registered for the certificate prior to July 1, 2024, are to follow the curriculum that was in place for their year of registration. Please refer to the archived calendar for details.

Have questions? Contact our Client Services team at ce@torontomu.ca for more information.

Certificate Requirements

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

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

Admission Criteria

Recommended:
- Certificate in Occupational Health and Safety or equivalent

OR
- Mature student status and at least three years of professional experience in occupational health and safety.

If you wish to apply to register for the Certificate in Advanced Safety Management, contact the Program Coordinator, Rose Reid at rosereid@torontomu.ca.

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Financial Support

Awards and Bursaries
The Chang School offers both merit-based awards and need-based financial aid.

Ontario Student Assistance Program (OSAP)
This certificate program is OSAP-eligible. To learn more, visit the Student Financial Assistance website.

Questions?
Contact Client Services ce@torontomu.ca

Required Courses

- ☐ COHS 323   Accident Theory
- ☐ COHS 516   Ergonomics
- ☐ COHS 523   Safety Evaluation Techniques
- ☐ COHS 623   Safety Control Methods
- ☐ COHS 709   Fire and Radiation Safety
- ☐ COHS 800   Sectoral Applications
- ☐ CINT 900   Program Planning and Evaluation Strategies
- ☐ CINT 902   Disability Issues

AGING & GERONTOLOGY

Certificate can be completed online.

Delivery	Online
Courses	6
Length	1 year
Cost	$3,500–$3,800

SUPPORT CANADA'S OLDER ADULTS WITH AN AGING AND GERONTOLOGY CERTIFICATE

Over the next decade, older adults will make up a quarter of Canada's population, according to Statistics Canada. This means that there will be a growing number of opportunities for gerontology professionals trained in the unique needs of our aging community members. The Certificate in Aging and Gerontology from The Chang School will set you up for success in finding meaningful work ensuring our older adults have a great quality of life.

This gerontology certificate provides knowledge and skills to support all the diverse sectors that serve older adults, including health and social services, but also banking, financial planning, real estate, insurance, travel and tourism, hospitality, technology, entrepreneurship, architecture and urban planning, and home modification. (Looking to provide direct care for older adults? While this program doesn't provide training in directly caring for older adults, it can be used to help you transition into a long-term care career when done in combination with other educational credentials.)Our coursework is taught by professionals with extensive community experience in gerontology across a vast array of fields, including social work, health sciences, nursing, public health, policy, and more. They'll help you expand your hands-on experience, and learn how to best respond to the needs and opportunities of an aging population and promote yourself as uniquely suited to working with older-adult clients. Collaborating with these instructors and your fellow learners will also help you start building your industry network early on, giving you an advantage in a hot job market.

Thinking of starting your own business working with older adults? This gerontology certificate program can also help you recognize and act on the new entrepreneurial opportunities that come from this new demographic shift. It's also offered online and can be completed on your own schedule and timeline, alongside your other responsibilities.

Are you ready to make a difference in your community? Step up for our older adults and begin your gerontology training today.

Who should take this Aging and Gerontology certificate?
- You're working as an educational or public administrator, retirement housing manager, recreational or health consultant, or human resource coordinator and need to build your skill set so you can design programs and develop policies for older adults
- You're a professional working in areas that provide services and products to older adults, like banking, financial planning, real estate, insurance, travel and tourism, hospitality, technology, entrepreneurship, architecture and urban planning, or home modification
- You're a recent graduate of health, social work, counseling, sociology, or psychology and are looking to start a career working with older adults

What will you learn while taking the Aging and Gerontology certificate?
You'll learn how to:
- Examine the implications of aging and evaluate the services available for aging populations in Canada and globally from the following a variety of perspectives, including social, political, psychological, demographic, and more
- Influence practice and policy change in the field of aging
- Identify how technological innovation influences health and social engagement within aging populations
- Position yourself to best respond to the needs and opportunities of older adult clients

Certificate Requirements

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

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

Admission Criteria

Recommended:
- Ontario Secondary School Diploma (OSSD) or equivalent
  - With 6 Grade 12 U or M credits
OR
- Mature student status

Financial Support

Awards and Bursaries
The Chang School offers both merit-based awards and need-based financial aid.

Ontario Student Assistance Program (OSAP)
This certificate program is OSAP-eligible. To learn more, visit the Student Financial Assistance website.

Questions?
Contact Client Services ce@torontomu.ca

Required Courses

- ☐ CINT 901   Gerontology: Critical Issues and Future Trends
- ☐ CINT 930   Aging: From Cells to Society
- ☐ CINT 935   Ethical/Legal Frameworks in Aging
- ☐ CINT 940   Mobilizing Research for Change

Electives (select 2)

- ☐ CHSM 307   Principles of Long Term Care Service Del.
- ☐ CINT 555   Special Topics in Interdisciplinary Studies
- ☐ CINT 900   Program Planning and Evaluation Strategies
- ☐ CINT 904   Health Promotion and Community Development
- ☐ CINT 907   Team Work for Community Services
- ☐ CINT 945   Technology and Aging Populations
- ☐ CZON 100   Zone Learning Project I

APPLIED DIGITAL GEOGRAPHY & GIS

Certificate can be completed online.

Delivery	Online
Courses	6
Length	1 to 2 years
Cost	$5,400–$5,900

MASTER THE GLOBE WITH AN APPLIED DIGITAL GEOGRAPHY AND GIS CERTIFICATE

Companies and government organizations need to make more informed decisions – and geographic information systems (GIS) can help them make it happen. The Chang School Certificate in Applied Digital Geography and GIS provides the training you need to take advantage of all the career opportunities in this growing field. There are so many public and private sectors you can get into with these skills, whether it's government, business, utilities, planning, municipal services, health, retailing, environmental management, or community and social services.

You don't need any GIS experience to take this GIS program. You'll master the principles and concepts of digital geography and fundamental GIS skills, along with workplace applications, GIS applications, and implementation issues. Plus, the data interpretation and analytical skills you'll learn during this certificate will set you apart in the job market, since many programs are often limited to teaching only data display and mapping techniques. Our GIS courses also provide presentation training so you can successfully share your GIS analyses and policy recommendations with senior stakeholders.This GIS certificate prioritizes hands-on assignments to get you career-ready with all the relevant skills, knowledge, and experience to start applying for GIS jobs ASAP. Real-world datasets help you understand the current issues and problems in the industry, and all our course content and examples are updated on a regular basis to ensure they're relevant to the current job market. We teach you the latest GIS applications being used in the market today, including ArcGIS Pro and QGIS.

All our instructors are experts and active practitioners in the field, so collaborating with your instructors can help you start building your professional network before you even graduate. Plus, you can complete this GIS certificate online in as little as a year and on your own schedule.

So, are you ready to get started?
Who should take this Applied Digital Geography and GIS certificate?
- You're a professional in another field who'd like to pivot to a career as a GIS professional
- You're interested in starting a career in the GIS industry

What will you learn while taking the Applied Digital Geography and GIS certificate?
You'll learn how to:
- Understand geographic databases, visualization, digital geography, and system components
- Identify GIS applications in business, municipalities, utilities, environmental management, and community and social services
- Understand and address legal and ethical issues, innovations in GIS, GIS programming, map algebra, digital image processing, and web mapping

Certificate Requirements

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

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

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

Admission Criteria

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

Admission Application

You must complete a pre-approval application and receive an approval code before registering in your certificate. It's best to have your registration in place before enrolling in your first course. First, complete our Application for Program Pre-Approval: Applied Digital Geography and GIS Certificate Program (PDF). Then, submit your required documentation.

Financial Support

The Chang School offers both merit-based awards and need-based financial aid. This certificate is not eligible for the Ontario Student Assistance Program (OSAP).

Questions?
Contact Client Services ce@torontomu.ca

Required Courses

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

Electives – Group A (select 1 or 2)

These professional applications courses allow you to focus on an area of interest.
- ☐ CODG 123   Digital Geography Applications in Utilities Planning
- ☐ CODG 124   Digital Geography Applications in Business Decision-Making
- ☐ CODG 125   Digital Geography Applications for the Municipal Professional
- ☐ CODG 126   Digital Geography Applications in Environmental Management
- ☐ CODG 127   Digital Geography Applications in Community & Social Services

Electives – Group B (select 2 or 3)

- ☐ These courses are designed to provide you with some understanding of the
- ☐ more complex core skills and issues facing business, municipal, environmental,
- ☐ utilities or community and social services professionals when they employ
- ☐ digital geography in their decision-making.
- ☐ CODG 130   Legal and Ethical Issues in GIS and Digital Data
- ☐ CODG 131   Issues and Innovations
- ☐ CODG 132   Customizing GIS Software: Applications Programming
- ☐ CODG 133   Map Algebra: Topology and Overlay
- ☐ CODG 135   Digital Image Processing and Applications
- ☐ CODG 136   Web Mapping

Electives – Group C (select up to 1)

- ☐ This category only applies if you select a total of 3 electives from Groups A and
- ☐ B (combined), and wish to take 1 of the following electives as your final course
- ☐ for certificate completion.
- ☐ CODG 210   Spatial Database Management Systems
- ☐ CODG 211   Advanced GIS Programming
- ☐ CODG 212   Spatial Statistical Methods
- ☐ CODG 213   Internet GIS

Important Note: The Advanced Applied Digital Geography and GIS Certificate in Arts will not be accepting any new registrants. This certificate has been discontinued effective Fall 2022. Students formally registered in the certificate must complete the program requirements in effect at the time they registered. For curriculum details, please refer to the archived calendar for your year of registration. For more information, please contact ce@torontomu.ca

ARCHITECTURE

Certificate can be completed online.

Delivery	Online
Courses	4
Length	8 months to 1.5 years
Cost	$4,500–$5,500

DESIGN A REWARDING TECHNOLOGIST CAREER WITH AN ARCHITECTURE CERTIFICATE

Want to succeed in the architecture, engineering, or construction industries? The Chang School Certificate in Architecture will teach you how to use the digital architecture technology that employers are looking for.

Master must-have programs like AutoCAD and Revit, and grow your knowledge around building regulations and policies, sustainable building practices, and building materials for the Canadian climate. Many of our instructors are leading, licensed, and practicing architects working in the field, so they bring real-world expertise to all our architecture courses – and can help you begin building your professional network before you even graduate.This four-course online architecture program is the only one of its kind available and is shorter than similar programs offered at other schools. Because it isn't a full-time program, you can continue working and get the certification you need.

Job postings for "architect" and "architectural technologists" saw a 60 percent increase between 2020 and 2021, according to Burning Glass Labour Market Insights. Are you ready to start landing these roles? Start your certificate today.

Meet Our Learners

During my career, there have been numerous recessions that have severely impacted the architectural community, resulting in many searching for employment as projects and clients disappeared. I was almost always guaranteed a position since employers understood that TMU grads are capable and could be put to work on virtually any task from day one.
    — Paul Backewich

Who should take this Architecture certificate?
- You hold an undergraduate degree in a related field, such as urban planning, sustainability and sustainable science, economics, design, urban agriculture, civil engineering, or mechanical engineering, and want to enter or excel in the architecture field
- You're a new Canadian looking to get Canadian credentials and Canadian-based training to help secure an architectural technologist position

What will you learn while taking the Architecture certificate?
You'll learn how to:
- Use Revit, AutoCAD, 3D Studio MAX, Sketch Up and Adobe Acrobat Suite
- Apply building codes to computer-aided architectural technologist projects to meet the regulations that govern approved building permits issued for building construction or renovation, including adherence to commercial, municipal and provincial planning standards
- Plan within computer-aided architectural technologist projects for the utilization of building materials required for Canada's northern climate and for sustainable building construction, preservation and renewal, including LEED and Net Zero building science principles
- Implement solutions to technology and planning issues that northern climate architects, architectural technologists, and building science professionals need to deal with when designing, constructing or preserving buildings with full regulatory compliance
- Comply with green building and LEED rating system requirements in new buildings or building conservation, including use of materials and methods and assurance of indoor environmental quality, and deployment of up-to-date digital architecture technologies when completing architectural drafting and drawing projects for new building design and construction or for adaptive re-use of building
- Stand out from the competition by learning how to build presentation and communication skills on top of architectural skills

Note: Effective July 1, 2024, the curriculum for the certificate in Architecture has been updated.

Learners who registered for the certificate prior to July 1, 2024, are to follow the curriculum that was in place for their year of registration. Please refer to the archived calendar for details. If you're interested in the new curriculum and would like to explore your options, contact our Client Services team at ce@torontomu.ca for more information.

Certificate Requirements

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

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

Admission Criteria

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

Financial Support

The Chang School offers both merit-based awards and need-based financial aid. This certificate is not eligible for the Ontario Student Assistance Program (OSAP).

Questions?
Contact Client Services ce@torontomu.ca

Required Courses

- ☐ CKAR 205   Building Codes and Regulations
- ☐ CKAR 310   Materials and Methods
- ☐ CKAR 500   Sustainable Buildings
- ☐ CKAR 785   Building Info Modelling (REVIT)

BUSINESS COMMUNICATION

Includes online and in-person courses.

Delivery	Hybrid
Courses	8
Length	1 to 1.5 years
Cost	$4,600–$5,200

HELP COMPANIES COMMUNICATE MORE CLEARLY WITH A BUSINESS COMMUNICATION CERTIFICATE

Are you looking to get ahead in advertising, marketing, or public relations? Or do you just want to boost your business communication skills to advance your career? Either way, The Chang School's Certificate in Business Communication can take your career to the next level.

Writing. Speaking. Visual communication. Our Business Communication certificate will teach you all the contemporary business communications strategies you need to succeed in a changing world and workplace. These skills are highly in-demand across a multitude of opportunities in numerous industries. Training covers a wide variety of must-have communication skills, including corporate communications courses, along with courses in interpersonal communication, management, promotional communications, and even communications and business French. An experiential learning component gives you practice with real-world issues and helps you hone your business communication skills.

Want to learn how to craft world-class reports and presentations? We also offer business communication courses in organizational report writing, professional presentations, and short management reports. Coursework in communicating in virtual environments will also help you master the complexities of online communication.

As workplaces become more diverse, it's crucial for companies to have leaders with the business communication skills needed to help all employees and stakeholders thrive. Our Business Communication certificate teaches you contemporary intercultural communication so you can help create more inclusive workplaces – and a more inclusive world.

You can finish this Business Communication certificate in as little as three semesters, or one year. Our instructors provide you with tons of support along the way; here at The Chang School, they are here to support the success of all learners.

Come join us in class – start your journey towards a Business Communication certificate today.

Who should take this Business Communication certificate?
- You're a professional seeking to advance in your organization or career
- You want to improve your communication skills and hone your ability to write, speak, and communicate visually in diverse and inclusive work environments
- You'd like to increase your confidence and ability to reach internal and external audiences
- You're interested in new media platforms and developing skills to use them effectively
- You want to make your voice heard and influence people around you

What will you learn while taking the Business Communication certificate?
You'll learn how to:
- Master fundamental communication skills to respond to the demands of the contemporary workplace
- Develop your written, spoken, and visual communication skills and apply them, and evaluate the communication products that rely on them
- Analyze communication scenarios and develop appropriate and effective organizational and individual responses
- Develop practical strategies to communicate effectively using new media forms
- Use communication techniques to create equitable, diverse, and inclusive professional environments

BUSINESS COMMUNICATION

Certificate Requirements

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

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

Admission Criteria

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

OR
- Mature student status

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Financial Support
The Chang School offers both merit-based awards and need-based financial aid. This certificate is not eligible for the Ontario Student Assistance Program (OSAP).

Questions?
Contact Client Services ce@torontomu.ca

Required Courses

- ❑ CCMN 279   Introduction to Professional Communication
- ❑ CCMN 313   Organizational Report Writing
- ❑ CCMN 314   Professional Presentations
- ❑ CCMN 413   Corporate Communications
- ❑ CCMN 414   Interpersonal Communication in Management
- ❑ CCMN 443   Contemporary Intercultural Communication

Electives (select 2)

- ❑ CCMN 114   Short Management Reports
- ❑ CCMN 315   Issues in Organizational Communication
- ❑ CCMN 447   Communication and Law
- ❑ CDCM 300   Communicating in Virtual Environments
- ❑ CDCM 415   Promotional Communications
- ❑ CFRE 502   Communication and Business French

BUSINESS DECISION ANALYSIS

Includes online and in-person courses.

Delivery	Hybrid
Courses	5
Length	1.5 to 2 years
Cost	$3,100–$3,800

HELP BUSINESSES MAKE SMARTER DECISIONS WITH A BUSINESS DECISION ANALYSIS CERTIFICATE

Businesses now have another way to get a competitive edge: data. More and more companies are hiring data analysts to use the power of data to help them identify opportunities and solve their business issues. The Chang School is proud to offer a Certificate in Business Decision Analysis to give you the knowledge you need to join the fast-growing business analysis industry.

You can tailor the Business Decision Analysis certificate to your schedule, and complete the business analyst courses on your own time. Excited to enter the field as soon as possible? You can complete this program in just a year and a half, and do classes online or in-person, whichever works best with your personal learning style.Our business analyst courses have been designed by seasoned analysts active in the field, ensuring that all classes provide the most up-to-date business analyst training, complete with real-world data sets and current business issues. Not only will you learn how to identify the most pressing issues for organizations, but you'll master the must-have skills to inform critical business decisions, from data analytics and quality management to business optimization and forecasting techniques.

Soon, you'll know how to harness all that business analysis training to support smarter, better business decisions – and start applying for jobs in this booming market, or boost the career you already have. So, are you ready to start your business analyst journey?

Who should take this Business Decision Analysis certificate?
- You work in a sector – like health, finance, or retail – or job function – such as supply chain management – in which data analytics increasingly drives business outcomes and you want a better understanding to excel in your role or be promoted
- You want to add valuable skills in business analysis to your current professional practice
- You're a recent graduate looking to increase your competitiveness in the job market by complementing your degree with business analysis skills

What will you learn while taking the Business Decision Analysis certificate?
You'll learn how to:
- Describe, summarize, present, and analyze statistical data, and create data collection and management strategies to support business decision-making
- Ask the right questions to identify and define particular business issues, then leverage data from across the organization to improve business outcomes
- Use data to develop priorities for investing limited resources to the best advantage
- Analyze business problems using model formulation and problem-solving techniques
- Apply time-series forecasting techniques and understand the practical problems of forecasting (data acquisition, model selection, and the interpretation of results)

Note: Effective Fall 2020, the Certificate in Business Decision Analysis has been revised. Students who were formally registered in the certificate prior to July 2, 2020 must complete the curriculum requirements that were in effect at the time of your registration. For curriculum details, refer to your year of registration in the archived calendar.

Certificate Requirements

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

Supplies **Required:**
A calculator with specialized statistical features is integral to many quantitative methods courses. Software and calculator specifications will be announced at the first class.

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

Admission Criteria

Recommended:
- Ontario Secondary School Diploma (OSSD) or equivalent
    - With 6 Grade 12 U or M credits (including Mathematics)
OR
- Mature student status with relevant professional experience in business

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Financial Support

Awards and Bursaries
The Chang School offers both merit-based awards and need-based financial aid.

Ontario Student Assistance Program (OSAP)
This certificate program is OSAP-eligible. To learn more, visit the Student Financial Assistance website.

Questions?
Contact Client Services ce@torontomu.ca

Required Courses

- ❑ CQMS 210   Applied Statistics for Business

Electives (select 4)

- ❑ CGMS 422   Quality Management
- ❑ CIND 123   Data Analytics: Basic Methods
- ❑ CITM 501   Prescriptive Analytics and Simulation
- ❑ CQMS 442   Multiple Regression for Business
- ❑ CQMS 521   Business Optimization
- ❑ CQMS 703   Business Forecasting Techniques

BUSINESS FRENCH & TRANSLATION

Courses completed in-person.

Delivery	In person
Courses	6
Length	1 to 3 years
Cost	$3,000–$3,100

EXPAND YOUR OPPORTUNITIES WITH A BUSINESS FRENCH AND TRANSLATION CERTIFICATE

According to census data, Canadians who speak both French and English earn more on average than people who only speak one language. You, too, can tap into this extra income by boosting your French and translational skills with The Chang School's Certificate in Business French and Translation. This certificate can open up a whole world of career opportunities for you and your in-demand business French and business translation skills, whether it's here in Canada or abroad in other Francophone countries.

This certificate will upgrade your general French language skills, advancing your business vocabulary and empowering you to conduct business in French. You'll also develop understanding of the cultural differences necessary to thrive in our contemporary multicultural world. Unlike many traditional business-French-only or translation-only programs, our certificate offers a range of specialized and practical translation courses to improve both your French communication and French language translation skills, making you even more sought after in the job market. Whether it's mastering the differences between English and French writing protocols or learning techniques for creating translations from French to English, we give you all the prep you need for this career path.You can also get to know more about contemporary French and Francophone culture, along with the evolution of the French language, giving you valuable context to help evolve your skills and set yourself apart in the job market even more.

This translation certificate can be completed in as little as one year, enabling you to explore new career options in a short amount of time.

So, are you ready to start pursuing that extra income? Allons-y!

Who should take this Business French and Translation certificate?
- You've already completed the Certificate in Proficiency in French or can demonstrate an equivalent level of fluency

What will you learn while taking the Business French and Translation certificate?
You'll learn how to:
- Utilize analytical skills to mitigate financial and political risk when conducting international business transactions
- Use French in business transactions and communications
- Build your business French vocabulary
- Identify the important differences between English and French writing protocol
- Master English-to-French translation techniques
- Express the same concepts naturally in French and English
- Navigate major grammatical structures
- Understand the differences and parallels between oral and written French
- Stay current on contemporary French and Francophone culture and the evolution of the French language

Certificate Requirements

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

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

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

Admission Criteria

- Certificate in Proficiency in French

OR

- Admission by placement assessment

Before enrolling in your first course, you must complete our online placement assessment. The results of this placement assessment will help determine which course you should enrol in first.

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Financial Support

Awards and Bursaries
The Chang School offers both merit-based awards and need-based financial aid.

Ontario Student Assistance Program (OSAP)
This certificate program is OSAP-eligible. To learn more, visit the Student Financial Assistance website.

Questions?
Contact Client Services ce@torontomu.ca

Required Courses

- ❑ CFRE 502   Communication and Business French
- ❑ CFRE 507   English-French Translation I
- ❑ CFRE 602   Business French in Practice
- ❑ CFRE 607   English-French Translation II
- ❑ CFRE 707   Introduction to French-English Translation

Electives (select 1)

- ❑ CFRE 510   Effective Writing
- ❑ CFRE 515   Introduction to Business French
- ❑ CFRE 610   Cultural Context of Writing
- ❑ CFRE 706   The Life and Times of the French Language

BUSINESS MANAGEMENT

Certificate can be completed online.

Delivery	Online
Exam	In person
Courses	8
Length	1.5 to 2 years
Cost	$5,800–$5,900

EXCEL IN THE CORPORATE WORLD WITH A BUSINESS MANAGEMENT CERTIFICATE

The business world is a competitive world. Here at The Chang School, our Certificate in Business Management will give you the tools you need to be resilient and succeed long-term: not just survive, but thrive.

With our Business Management certificate, you can do all your business management courses online, in as little as a year and a half.

There are endless job opportunities for graduates with business-management skills; you'll have your pick of industries, whether you want to work in food services, finance, healthcare, or manufacturing.Our robust curriculum is packed with business management courses that teach everything you need to master the business-management fundamentals, like supply and demand, the theory of the firm, and distribution of income. We teach you the foundational skills to become a business management pro, providing in-depth training in accounting, information systems, business law, human resources management, and marketing. You'll also learn how to analyze financial information. You'll be chatting with colleagues about complex business concepts like microeconomics or global management with confidence in no time.

You can get a head start on networking before you even graduate. There are plenty of opportunities to connect with academic faculty and your instructors during your business management courses – many are professionals working in the field with valuable insights to share about the nuances of the business world.

They're rooting for you to succeed in this competitive world, and so are we. Let's work together to create the business career of your dreams.

Who should take this Business Management certificate?
- You want to gain foundational business skills to expand your career options, and job and promotion opportunities
- You're interested in business and looking to change careers
- You're a small business owner who wants to strengthen your business skills for your current business, or you'd like to start your own business in the future
- You're a newcomer who'd like to complete online business courses in Canada to gain a Canadian credential and learn about the Canadian business environment

What will you learn while taking the Business Management certificate?
You'll learn how to:
- Navigate the complexities of the modern-day business environment and the main functional areas of business, including marketing, accounting, economics, information management, law, and human resources management
- Understand business behaviour and decision-making under various market conditions
- Master the basics of marketing, including theories, principles, and concepts of market and consumer behaviour
- Understand economics fundamentals, like supply and demand, the theory of the firm, and distribution of income
- Analyze financial statement data

Certificate Requirements

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

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

Admission Criteria

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

OR
- Mature student status with relevant professional experience in business

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Financial Support

Awards and Bursaries
The Chang School offers both merit-based awards and need-based financial aid.

Ontario Student Assistance Program (OSAP)
This certificate program is OSAP-eligible. To learn more, visit the Student Financial Assistance website.

Questions?
Contact Client Services ce@torontomu.ca

Required Courses

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

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

- CACC 100   Introductory Financial Accounting
- CACC 110   Financial Accounting
- CECN 104   Introductory Microeconomics
- CGMS 200   Introduction to Global Management
- CITM 100   Foundations of Information Systems
- CITM 102   Business Information Systems
- CLAW 122   Business Law
- CMHR 523   Human Resources Management
- CMKT 100   Principles of Marketing
- CQMS 110   Applied Mathematics for Business

CANADIAN DIETETIC KNOWLEDGE COMPETENCIES

The Internationally Educated Professionals in Nutrition (IEPN) program is currently not accepting applications until further notice. For more information, please contact ce@torontomu.ca.

Interested in certificates at The Chang School? Learn more about our wide range of programs and find the right fit for you.

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

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

Certificate Requirements

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

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

Admission Criteria

Required:
- An assessment completed by the College of Dietitians of Ontario (CDO)
  - And proof of English proficiency at the required level

For the CDO assessment, eligible applicants must have written the Knowledge and Competency Assessment Tool (KCAT) exam within the context of The College of Dietitians of Ontario Competency Assessment.

Admission Application

An admission application is required for this program. A two-step pre-approval process will be conducted by the program coordinator including submission of an application package and an in-person assessment for qualifying applicants.

For more information, see How to Apply or contact ce@torontomu.ca.

Required Courses

- ☐ CFNN 202   Public Health Nutrition
- ☐ CFNN 301   Intro to Nutrition Management of Human Disease
- ☐ CFNN 400   Advanced Nutrition for Health Promotion
- ☐ CFNN 401   Advanced Nutrition Management of Human Disease
- ☐ CFNP 100   Introduction to Professional Practice
- ☐ CFNP 350   Interpersonal Comm/Counselling Nutrition
- ☐ CFNP 550   Introduction to Dietetics Practice
- ☐ CFNR 201   Research Methods and Statistics
- ☐ CFNS 200   Quantity Food Management
- ☐ CFNS 400   Food Service Systems Management

CANADIAN SOCIAL WORK PRACTICE

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

The Certificate in Canadian Social Work Practice program is currently accepting applications for the 2025-2026 academic year until June 16, 2025. Apply today to get started.

Industry and Careers

This program can lead to career paths in various areas in social work (for those eligible for registration with the Ontario College Of Social workers and Social Service Workers - OCSWSSW) such as:
- Brief and supportive counselling
- Case management
- Child protection
- Children, youth and family support
- Crisis and housing, mental health and addiction
- Violence against women services

Who Should Take This Certificate?
The certificate program is offered to two groups of applicants:
- Experienced social workers whose academic credentials have been recognized as equivalent to a BSW or an MSW by the Canadian Association of Social Workers (CASW), and/or who are registered members of the Ontario College of Social Workers and Social Service Workers (OCSWSSW)
OR
- Those with a degree in the social sciences or humanities who also have significant social service experience

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

What Will You Learn?
Offered part-time over a 13-month period (beginning in the Summer term), the program includes courses, mentorship, and work experience. The Internationally Educated Social Work Professionals (IESW) Program provides advanced entry for its nine-month certificate program to underemployed IESWs with proof of advanced academic English language proficiency. The certificate is open only to internationally educated professionals with social service experience approved through the IESW Program admissions process.

Required Courses

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

- ❑ CSWP 301   Decolonizing and Anti-Oppression Practice
- ❑ CSWP 402   Social Policy and Social Inclusion
- ❑ CSWP 917   Special Topics I
- ❑ CSWP 918   Special Topics II
- ❑ CSWP 36A   Field Practicum-A
- ❑ CVSW 900   Foundations of Social Work

CARIBBEAN STUDIES

Certificate can be completed online.

Delivery	Online
Courses	6
Length	8 months to 1 year
Cost	$3,300–$3,600

BECOME A CARIBBEAN EXPERT WITH A CARIBBEAN STUDIES CERTIFICATE

Expert knowledge about the Caribbean is a great asset in so many booming industries. Architectural science. Education. Politics and governance. Urban and regional planning. International economics and finance. Business. Healthcare. Hospitality and tourism. Immigration. No matter what sector you want to work in, boosting your expertise in the Caribbean can help you stand out to employers. The Chang School Certificate in Caribbean Studies will make you do just that.

The region has rich cultural, racial, and ethnic diversity, and many Caribbean people continue to settle in Canada, making a significant impact on Canada's cultural identity. The skills gained from this unique Caribbean Studies certificate offer a fresh perspective on and understanding of these communities. In our certificate, we cover everything from ecology, gender, kinship and sexuality to culture, literature, tourism, and international relations. You'll learn about issues like colonialism, slave trade and enslavement, indentured labour, post-plantation economy, and migration and trans-nationalism as well.Soft skills are more crucial than ever in getting senior positions. With this Caribbean Studies certificate, you can build transferable skill sets in critical thinking, problem-solving, interpersonal skills, self-awareness, cultural competence, understanding how to form connections with people from diverse backgrounds and political structures, and developing new social perspectives.

Start getting to know the region and its many fascinating facets today.

Who should take this Caribbean Studies certificate?
- You'd like to do business with or provide services to Caribbean communities in the region or the diaspora

What will you learn while taking the Caribbean Studies certificate?
You'll learn how to:
- Understand the impact of global issues, such as climate change, forced and volunteer migration, food sustainability, international relations, and other social and political factors that impact small economies such as those found in the Caribbean

CARIBBEAN STUDIES

Certificate Requirements

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

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

Admission Criteria

Required:
- Ontario Secondary School Diploma (OSSD) or equivalent
  - With 6 Grade 12 U or M credits
OR
- Mature student status

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Financial Support

Awards and Bursaries
The Chang School offers both merit-based awards and need-based financial aid.

Ontario Student Assistance Program (OSAP)
This certificate program is OSAP-eligible. To learn more, visit the Student Financial Assistance website.

Questions?
Contact Client Services ce@torontomu.ca

Required Course

- ❑ CCRB 100   Introduction to the Caribbean

Electives (select 5)

- ❑ CCRB 500   Families in the Caribbean
- ❑ CCRB 501   Racism and Caribbean Peoples in Canada
- ❑ CCRB 502   Cultural Traditions in the Caribbean
- ❑ CCRB 600   Postcolonial Caribbean Society
- ❑ CCRB 603   Special Topics in Caribbean Studies
- ❑ CCRB 605   Caribbean Tourism: Impacts and Resistance
- ❑ CCRB 614   Caribbean Critical Thought
- ❑ CENG 620   Literatures of the Caribbean
- ❑ CFRS 602   French Caribbean Literature and Culture
- ❑ CGEO 705   Environment and Society in the Caribbean
- ❑ CHST 222   The History of The Caribbean
- ❑ CSPN 804   Latin American Culture II
- ❑ CSPS 502   Spanish Caribbean Literature and Culture

COMMUNITY ENGAGEMENT, LEADERSHIP, & DEVELOPMENT

Certificate can be completed online.

Delivery	Online
Courses	6
Length	1 to 2 years
Cost	$3,500–$3,800

BE THE CHANGE YOU WANT TO SEE IN THE WORLD WITH A COMMUNITY ENGAGEMENT, LEADERSHIP, AND DEVELOPMENT CERTIFICATE

Are you ready to make a real difference in the world? Working in community engagement is a great way to help our communities thrive. The Chang School is proud to offer a Certificate in Community Engagement, Leadership, and Development to provide the leaders of tomorrow the leadership development courses they need to excel in this growing field today.

This unique Community Engagement certificate provides learners with a balanced curriculum that includes both foundational knowledge and community development skills. Our instructors are community workers who practice in the field, so you'll gain real-world insight into current issues and learn examples of community engagement in areas like food security, family support, Indigenous communities' world views, social work, fundraising, and conflict resolution.We also prioritize social justice and community-based learning. By learning progressive anti-oppression, anti-Black racism, and anti-colonial theory, our graduates are well-prepared to provide more inclusive community engagement and better community-building.

Finish off the certificate with our capstone course, which allows you to run a small community-based project and apply what you've learned in the coursework. Completing a Community Engagement, Leadership, and Development certificate gives you more options when you're looking to boost your graduate-school application, forge a new career or enhance your existing one. Gaining this certificate can help you excel in richly rewarding fields like social services, education, labour, health, housing, transportation and more.

Life can be busy, so this certificate can be done 100 percent online and can be completed at your own pace alongside your family or work responsibilities. You can complete our certificate in as little as one year.

The world needs more impassioned advocates for community change. All it takes to make a difference in the world is that first step. Come take it with us.

Who should take this Community Engagement, Leadership, and Development certificate?
- You're looking to pivot careers and want to explore the community development space
- You're an experienced community worker who'd like to enhance your education, skill set, and career opportunities
- You're an undergraduate or recently graduated student in a field like social work, child and youth care, early childhood studies, nursing, midwifery, public health, urban and regional planning, political science, education, or healthcare

What will you learn while taking the Community Engagement, Leadership, and Development certificate?
You'll learn how to:
- Enact and support active citizen participation in community and civic affairs
- Engage excluded groups to improve the well-being of neighbourhoods and organizations
- Assess and understand the demographics of an area
- Guide community outreach and engagement initiatives
- Develop and support the implementation of an engagement plan with diverse communities
- Advocate, conduct research, and evaluate community programs

COMMUNITY ENGAGEMENT, LEADERSHIP, & DEVELOPMENT

Certificate Requirements

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

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

Admission Criteria

Required:
- Ontario Secondary School Diploma (OSSD) or equivalent
- With 6 Grade 12 U or M credits
OR
- Mature student status with relevant work experience

Required Courses

- ❑ CSWP 934   Community Engagement Foundations
- ❑ CSWP 935   Engaging Diverse Communities
- ❑ CSWP 936   Community Engagement Practices
- ❑ CSWP 937   Community Engagement Capstone

Electives (select 2)

- ❑ CFNY 407   Community Development and Food Security
- ❑ CINT 904   Health Promotion and Community Development
- ❑ CINT 905   Conflict Resolution in Community Services
- ❑ CINT 907   Team Work for Community Services
- ❑ CINT 911   International Community Development
- ❑ CINT 920   Community Collaborations
- ❑ CINT 902   Disability Issues
- ❑ CINT 914   Settlement Experiences
- ❑ CSWP 505   Critical Equity and Movements of Resistance
- ❑ CSWP 900   Race and Ethnicity
- ❑ CCLD 231   Families in Canadian Context I
- ❑ CCLD 435   Theory and Practice of Family Support
- ❑ CINT 908   Homelessness in Canadian Society
- ❑ CINT 965   Sex, Drugs and Incarceration
- ❑ CINT 910   Indigenous Peoples, Pol and Reconciliation
- ❑ CINT 922   Introduction to Indigenous Worldviews
- ❑ CSWP 933   Indigenous Health and Well Being
- ❑ CINP 913   Leadership in Nonprofits
- ❑ CINT 900   Program Planning and Evaluation Strategies
- ❑ CINT 916   Principles of Fundraising
- ❑ CINT 960   Leadership Framework for Community
- ❑ CPLE 795   Local Economic Development Fundamentals
- ❑ CTEC 210   Fundamentals of Project Management

COMPUTER CODING (FORMERLY COMPUTER PROGRAMMING APPLICATIONS)

All courses are in-person only.

Delivery   In-Person
Courses   6
Length   1 to 1.5 years
Cost $5,200–$6,000

BUILD THE FUTURE WITH A COMPUTER CODING CERTIFICATE

Computer coders are in high demand in Canada and around the world. Coders, software developers, and web developers can take their pick of industries and follow their passion into the field and position that excites them most.

The Chang School Certificate in Computer Coding covers the coding basics that can help you transition directly into industry, or prep you for graduate programs in Computer Science.You'll learn JavaScript, along with coding skills in more than a dozen other sought-after programming languages, including C++, C#, SQL, and R, along with Cloud Management. Python coding courses will also help you learn Python. You'll learn how to handle client and server architecture, dynamic databases, and enterprise network infrastructures as well, plus digital product and service deployment and production.

Interested in artificial intelligence (AI)? You'll learn AI frameworks as well. Lab time is crucial, so you also get access to our cutting-edge computer labs, giving you hands-on experience that will help you learn to code.

Want to enter this booming occupation as soon as possible? You can finish the certificate in just six courses, which can be completed in as little as a year and a half.

We can't wait to help you make the world just a little bit easier to navigate, for everyone.

Who should take this Computer Coding certificate?
- You want to gain the most in-demand technical coding skills for career advancement
- You come from a non-STEM background but want to gain experience in hands-on coding, software engineering, database technology, web and mobile development, and user support
- You're interested in applying for a Computer Science graduate program

What will you learn while taking the Computer Coding certificate?
You'll learn how to:
- Code for and develop digital products, apps, websites, and services
- Implement AI solutions
- Solve problems in cloud infrastructures, operating systems, networks, and data communications
- Explore cloud management and file-management techniques for database organization, design, and management
- Plan and manage computer programming projects using project-management tools

You'll learn how to use these tools:
- Python (PANDAs)
- C/C++
- R
- Spark
- XML
- Regular Expression (RegEx)
- AI frameworks, platforms, and solutions
- Gigraph
- SAS
- GitHub
- JavaScript
- C#
- SQL
- Machine learning
- LAMBDA
- Cloud computing
- Neural networks
- GraphLab
- UNIX
- MS Project

What career support is available for you?
During your certificate, we offer extensive career help, including:
- Virtual mentor services
- Alumni networking
- Synchronous weekly online sessions
- Educator support
- Tutoring services
- Career discussion forums

COMPUTER CODING
(FORMERLY COMPUTER PROGRAMMING APPLICATIONS)

Certificate Requirements

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

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

Admission Criteria

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

OR
- Mature-student status with permission of the academic coordinator

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, visit Curriculum Advising.

Required Courses

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

Electives (select 2)

- ☐ CCPS 213   Computer Organization I
- ☐ CCPS 311   Object Oriented Programming and Design
- ☐ CCPS 420   Discrete Structures
- ☐ CCPS 506   Comparative Programming Languages
- ☐ CCPS 510   Database Systems I
- ☐ CCPS 590   Operating Systems I
- ☐ CCPS 610   Database Systems II
- ☐ CCPS 613   Human-Computer Interaction
- ☐ CCPS 706   Computer Networks I
- ☐ CCPS 721   Artificial Intelligence I
- ☐ CIND 123   Data Analytics: Basic Methods
- ☐ CSCI 130   Mobile Robotic Devices Embedded Systems
- ☐ CTEC 210   Fundamentals of Project Management

CRIME ANALYTICS

Certificate can be completed online.

Delivery	Online
Courses	6
Length	1 year
Cost	$4,000–$4,500

BOOST YOUR CRIME-ANALYSIS SKILLS WITH A CRIME ANALYTICS CERTIFICATE

Did you know that in law-enforcement and security agencies, crime analyst jobs are usually performed by civilians? That means you don't have to be a police officer to help combat criminal behaviour.

The Chang School's Certificate in Crime Analytics can give you all the tools you need to help protect our communities and corporations from wrongdoing. This crime analyst certification will teach you how to perform crime analysis that can improve tactical and strategic decision-making in law enforcement. Plus, you can get your crime analysis certification at your own pace and start applying for intelligence analyst and crime analyst jobs in just one year.Crime analytics are evolving all the time, so our expert instructors – who are active in the field – update the course content regularly with real-world data to give you experience working on the most pressing current issues and problems.

Many programs only teach data display and mapping techniques, but our crime analysis certificate offers more in-depth and in-demand training around intelligence analysis, data interpretation, and presentation skills. You'll also master the latest geographical information software (GIS) being used in the market today, including ArcGIS Pro and QGIS. (And no prior GIS experience is required!) All courses prioritize social responsibility, so you'll learn how to be a good data steward, too.

You'll finish off your certificate with a crime analysis capstone project that teaches you how to apply everything you've learned in law enforcement. After that, you'll be ready to enter the fast-moving world of crime analytics and get your first crime analyst job – we're excited to help you make a difference.

Who should take this Crime Analytics certificate?
- You want a more data-driven job but need to strengthen your skills in computer science
- You have an interest or previous background in criminology, urban planning, geography, sociology, or psychology

What will you learn while taking the Crime Analytics certificate?
You'll learn how to:
- Apply your extensive practical experience in GIS mapping, data analysis, and decision support
- Understand criminal justice, policing, and criminal behaviour
- Understand the role of crime analysts in evidence-based policing, and the uses and misuses of data analysis

Certificate Requirements

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

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

Admission Criteria

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

OR
- Mature-student status

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Financial Support

The Chang School offers both merit-based awards and need-based financial aid. This certificate is not eligible for the Ontario Student Assistance Program (OSAP).

Questions?
Contact Client Services ce@torontomu.ca

Required Courses

	CODG 101	Spatial Databases and Digital Cartography
❑	CODG 102	Digital Geography and Spatial Analysis
❑	CODC 910	Spatial Methods in Crime Analysis
❑	CODC 911	Crime Analytics Project
❑	CCRM 318	Violence and Communities

Electives (select 1)

❑	CCRM 100	Introduction to Canadian Criminal Justice
❑	CCRM 102	Introduction to Criminology
❑	CCRM 300	Policing in Canada
❑	CODG 127	Digital Geography Applications in Community & Social Services
❑	CODG 210	Spatial Database Management Systems
❑	CODG 212	Spatial Statistical Methods
❑	CPSY 300	Psychology and Law
❑	CPSY 622	The Psychology of Criminal Behaviour

CRIMINAL JUSTICE & CRIMINOLOGY

Certificate can be completed online.

Delivery	Online
Courses	6
Length	1 year
Cost	$3,400–$3,700

LEARN ABOUT JUSTICE AND MAKE A DIFFERENCE WITH A CRIMINAL JUSTICE AND CRIMINOLOGY CERTIFICATE

Our society is always changing – and it needs passionate, informed advocates to help our criminal-justice system evolve along with it. The Chang School Certificate in Criminal Justice and Criminology gives you a critical and interdisciplinary understanding of how the criminal justice system really works, and what kind of career paths you can pursue within it.

Our criminal justice program is taught by instructors with many years of education and experience working in criminal justice; they offer critical real-world examples and case studies that will help you learn all about the most pressing issues within the system. We prioritize an interdisciplinary approach, offering online criminology courses covering criminology, geography, psychology, philosophy, and sociology to help broaden your skill set and help you stand out to future employers.You'll soon understand the complexities in trying to balance the interests of victims, offenders, the public, and politicians, along with human-rights and social-justice outcomes. You'll also gain key experience in how people are affected by the criminal justice system, and explore potential improvements to the system.

This program's criminal justice courses will set you up for success in a wide variety of fields. A certificate in criminal justice and criminology may help you kickstart a career working for non-profits who assist justice-involved people and engage with communities involved in reform, or police or security services. You may also work with young offenders in community or institutional settings, women and marginalized people in conflict with the law, and victims of crime.

Entering the field doesn't take long, either. You can complete all your criminology courses online, and finish the program in one year.

We need more people to help protect citizens. Are you ready to start our criminal justice program and fight for their rights?

Who should take this Criminal Justice and Criminology certificate?
- You want to enter, change, or advance your career in fields related to criminal justice

What will you learn while taking the Criminal Justice and Criminology certificate?
You'll learn how to:
- Think critically about issues in criminology
- Understand the operation of the criminal justice system, the professionals who work within the system, and the various stakeholders involved in the system
- Gain interdisciplinary knowledge and critical thinking skills with respect to social and criminal justice, including public and private security, policing, the administration of criminal justice, corrections, and community engagement

Certificate Requirements

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

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

Admission Criteria

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

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

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Financial Support

Awards and Bursaries
The Chang School offers both merit-based awards and need-based financial aid.

Ontario Student Assistance Program (OSAP)
This certificate program is OSAP-eligible. To learn more, visit the Student Financial Assistance website.

Questions?
Contact Client Services ce@torontomu.ca

Required Courses

- ❑ CCRM 100   Introduction to Canadian Criminal Justice
- ❑ CCRM 102   Introduction to Criminology

Electives - Group A (select 3)

- ❑ CCRM 200   Criminal Law
- ❑ CCRM 202   Victims and the Criminal Process
- ❑ CCRM 300   Policing in Canada
- ❑ CCRM 304   Youth Justice in Canada
- ❑ CCRM 306   Corrections in Canada
- ❑ CCRM 308   Criminal Courts in Canada
- ❑ CCRM 318   Violence and Communities
- ❑ CCRM 402   Criminal Justice and Social Inequality

Electives - Group B (select 1)

- ❑ CGEO 581   GIS, Geographic Data and Mapping
- ❑ CPHL 449   Philosophy of Punishment
- ❑ CPHL 612   Philosophy of Law
- ❑ CPSY 300   Psychology and Law
- ❑ CPSY 602   Developmental Psychopathology
- ❑ CSOC 502   Violence and the Family

CYBERSECURITY, DATA PROTECTION & DIGITAL FORENSICS

Certificate can be completed online.

Delivery	Online
Courses	6
Length	8 months to 1 year
Cost	$5,900–$6,300

PROTECT THE DIGITAL REALM WITH OUR CYBERSECURITY, DATA PROTECTION, AND DIGITAL FORENSICS CERTIFICATE

Cyber threats are an ever-growing issue for organizations. The Chang School offers a Certificate in Cybersecurity, Data Protection, and Digital Forensics that will give you the cybersecurity skills to safeguard data – and help you land a rewarding position in a high-paying field.

This certificate is fully aligned with the Certified Information Systems Security Professional (CISSP) exam and its eight cybersecurity domains, helping boost your chances of securing employment. Our online cybersecurity courses provide hands-on experience with cutting-edge industry tools to help you enter and advance in the field of cybersecurity. You'll learn penetration testing, network assessment and protection, intrusion detection, and encryption and decryption methods. You'll also master the basics of forensics analysis.Virtual labs and real-world projects allow you to flex your technical investigative skills and practice collecting evidence after a cybersecurity leak, and detecting and closing security gaps.

Mastering international cybersecurity laws is also a key part of our cybersecurity certification – and you'll even get to practice legal hacking.

The Cybersecurity, Data Protection, and Digital Forensics certificate is comprehensive, and many graduates land interviews for their first cybersecurity jobs right after finishing their cybersecurity certificate. All our cybersecurity courses are online, and the certificate can also be completed in as little as two or three semesters, so our learners can enter this well-paid field as cybersecurity specialists quickly.

Cybersecurity experts are in-demand across the public and private sectors – come learn with us and join their ranks.
Who should take this Cybersecurity, Data Protection, and Digital Forensics certificate?
- You aspire to join a field with long-term career advancement
- You want to master computer-security and cybersecurity forensic essentials
- You're a corporate or government employee who'd like to improve your cybersecurity skills

What will you learn while taking the Cybersecurity, Data Protection, and Digital Forensics certificate?
You'll learn how to:
- Extract evidence using investigative protocols and report on a variety of complex issues that may arise in enterprise information systems, like:
  - Ransomware
  - Social engineering and AI fraud
  - Network and computer-hacking
  - Cyber extortion
  - Organized cybercrime
  - Cyber-espionage detection
- Understand privacy and security protocols in compliance with complex legal and regulatory parameters
- Apply best-in-kind cybersecurity technical practices to real-world problems, like:
  - White- and black-box penetration-testing
  - System- and network-vulnerability identification
  - Security-weakness remediation
  - Manage and evaluate information security and data protection within the greater organizational governance structure
  - Understand AI Security, Cloud Security Cyber Secure Coding, Zero Trust Network Access (ZTNA) and to prevent and mitigate AI fraud threats, proprietary IP attacks, and data leaks

You'll also learn how to use these tools:
- Penetration testing
  - Kali Linux, Metasploit
  - Network assessment and protection
  - Wireshark, Nmap, Ncrack, Nessus, hping3
- WebGoat
- Online virus scanners
- Intrusion detection
  - iptables
  - Snort

- Encryption and decryption methods
- Certificate authority, digital signatures, and digital watermarking
- Hash functions
- CrypTool, S-Tools
- Forensics analysis
- Autopsy
- Honeypots
- FTK Imager
- Mobile: iPhone Analyzer

What career support is available for you?
During your certificate, we offer extensive career help, including:
- Virtual mentor services
- Alumni networking
- Synchronous weekly online sessions
- Educator support
- Tutoring services
- Career discussion forums

Certificate Requirements

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

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

Admission Criteria

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

Note: Knowledge of TCP/IP is recommended. You can gain some basic TCP/IP knowledge by reviewing videos (5-10 minutes) on YouTube.

Required Courses

- ❑ You may only select 1 of CKDF 145, or CSCI 243
- ❑ 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)
- ❑ CKDF 150   Digital Forensics Investigation
- ❑ CSCI 243   Continuity and Risk Management

DATA ANALYTICS, BIG DATA, & PREDICTIVE ANALYTICS

Certificate can be completed online.

Delivery	Online
Courses	6
Length	8 months to 1.5 years
Cost	$6,100–$6,200

POWER UP YOUR DATA CAREER WITH A DATA ANALYTICS, BIG DATA, AND PREDICTIVE ANALYTICS CERTIFICATE

Today, most business decisions are powered by data, making data science professionals highly in-demand. Want to start working as a data analyst in this lucrative field, or give your data science career a boost? The Chang School offers a Certificate in Data Analytics, Big Data, and Predictive Analytics that will set you up for success in this fast-paced field.

Our data science courses emphasize hands-on experience with data analysis tools and techniques, providing you with practical big-data skills that are directly applicable in the job market – and to a wide range of industries and roles. We also offer a capstone project course, so you can apply your newfound data science training to real-world problems.You can finish all our data science courses online in as little as two terms. We offer a ton of career support to our learners – something that isn't commonly found in other data science programs.

Our data science certificate is also recognized by an international, industry-leading association, The Institute for Operations Research and the Management Sciences (INFORMS), and meets the requirements for you to become a Certificated Analytics Professional (CAP®), giving our learners the opportunity for data science certification – and a competitive edge in the data analytics, big data, and predictive analytics job market.

Ready to embark on an exciting career in data science? Let's get started.

Who should take this Data Analytics, Big Data, and Predictive Analytics certificate?
- You're a professional looking to build your skill set in technically applied data analysis, machine learning, and predictive analytics, together with data organization and management, to advance in your career or change your career to data analytics
- You're a analyst who wants to advance their skills in big data analytics
- You're a manager or business leader who works with data, manages data analytics projects or leads teams of data analysts
- You want a data analyst or data scientist career and wish to gain the hands-on experience in analytics, coding, tools, and statistics needed to prepare and analyze data to make business decisions

What will you learn while taking the Data Analytics, Big Data, and Predictive Analytics certificate?
You'll learn how to:
- Excel in the data analytics domain, understanding data types and structures, data manipulation and cleaning, statistical analysis, data visualization, machine learning techniques, and programming languages for querying data, along with the business context to provide insights and recommendations effectively
- Enhance your practical experience in data analytics and machine learning, as well as your knowledge of AI, to progress to senior roles within the data-science domain
- Understand the different types of databases and how to manage and organize them
- Use statistics and machine-learning techniques to prepare, model, and analyze data
- Use programming languages like R and Python to turn data into insights that can help a business
- Leverage AI Assisted Coding technologies integrating with various IDEs offering utility with code suggestions, and augment your skills and understanding when it comes to complex coding scenarios, the codebase, or solving coding problems in data queries
- Complete data analytics assignments and final projects that you can include in your portfolio when applying for jobs

You'll also learn how to use these tools:
- Programming languages: R, Python
- Database management systems: MySQL, MongoDB
- Data collection and query tools: XPath, XQuery
- Data visualization tools: Tableau
- Libraries for data analysis: Python Libraries (pandas, NumPy, SciPy, Matplotlib), R Packages (dplyr, ggplot2)
- Integrated development environments (IDEs): RStudio, MS-VSCode, MySQL Workbench, Robo3T

What career support is available to you?
During your certificate, we offer extensive career help, including:
- Virtual mentor services
- Alumni networking
- Synchronous weekly online sessions
- Educator support
- Tutoring services
- Career discussion forums

DATA ANALYTICS, BIG DATA, & PREDICTIVE ANALYTICS

Certificate Requirements

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

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

Admission Criteria

Recommended:
- Ontario Secondary School Diploma (OSSD) or equivalent
  - With 6 Grade 12 U credits, including English, Mathematics (Advanced Functions and one of either Calculus and Vectors or Data Management), and Science (Biology or Chemistry or Physics)

OR
- M credits with a minimum average of 70 percent or equivalent academic status

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

Required Courses

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

- ☐ CCPS 270   Data Access and Management
- ☐ CIND 110   Data Organization for Data Analysts
- ☐ CIND 119   Introduction to Big Data
- ☐ CIND 123   Data Analytics: Basic Methods
- ☐ CIND 820   Big Data Analytics Project
- ☐ CIND 830   Python Programming for Data Science
- ☐ CMTH 642   Data Analytics: Advanced Methods

DIGITAL ART PRODUCTION

Certificate can be completed online.

Delivery	Online
Courses	6
Length	1 to 2 years
Cost	$3,800–$5,000

CREATE QUALITY CONTENT WITH A DIGITAL ART PRODUCTION CERTIFICATE

Digital art production is a booming field. Animation. Computer-generated effects. Digital games. Graphic design. Interaction and interface design. Mobile app development. Web design. All these digital arts industries have a vast number of opportunities and need skilled production professionals to fill them. The Chang School Certificate in Digital Art Production is the perfect springboard into a great career in digital production.

This digital arts program is the only part-time program in Canada that offers a combination of applied creative and digital courses at the university degree-credit level. You'll develop your creative and technical skills in digital content production, and learn design, visual communication, interaction design, and storytelling skills. You'll also enrich your art, media, and culture knowledge.You can complete the certificate online, and schedule each digital arts class around your other commitments. What are you interested in? Our digital art courses will boost your skills in everything from fiction screenwriting, digital skills and innovation, and graphic design, to interaction design and design for mobile devices. We also prioritize practical, hands-on experience, offering a co-op internship course option that allows you to gain professional production experience.

Excited to start producing great content? Start your Digital Art Production certificate now.Page

Who should take this Digital Art Production certificate?
- You're a working professional looking to make a career change to a rapidly growing creative field
- You're a visual artist who wants to enhance your work in film, photography, fine art, graphic design, or journalism and expand your audience
- You need to gain a solid foundation for further study at the undergraduate or graduate level

What will you learn while taking the Digital Art Production certificate?

You'll learn how to:
- Create original content and integrate it into the digital world
- Use theoretical, historical, and contemporary knowledge of art, design, and global communication in practice

DIGITAL ART PRODUCTION

Certificate Requirements

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

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

Admission Criteria

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

OR
- Mature student status

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Required Courses

- ❑ CMPC 101   Visual Studies I: Design Fundamentals
- ❑ CMPC 103   Reframing Art History

Electives (select 4)

- ❑ CDMP 125   Fiction Screenwriting
- ❑ CEID 100   Digital Skills and Innovation
- ❑ CFPN 534   Graphic Design
- ❑ CFPN 535   User Experience Design
- ❑ CFPN 541   Animation Practices
- ❑ CFPN 542   Design for Mobile Devices
- ❑ CFPN 547   Co-Operative Internship
- ❑ CMPC 203   Art in the Contemporary World
- ❑ CNPF 566   History of Animation

ECONOMICS & FINANCE

Certificate can be completed online.

Delivery	Online
Exam	In person
Courses	6
Length	8 months to 2 years
Cost	$3,500–$4,300

LAUNCH A CAREER IN BANKING AND FINANCE WITH AN ECONOMICS AND FINANCE CERTIFICATE

The banking and finance industries are always evolving. Employers need professionals with financial skills and up-to-the-minute knowledge of the market to help their companies excel. The Certificate in Economic and Finance offered by The Chang School will give you the education – and edge – you need to make a real impact in this competitive industry.

Our coursework in microeconomics, macroeconomics, and managerial finance will teach you how to analyze information, compile statistics, and make informed financial decisions. Investment courses give you deep knowledge in areas like derivatives, international financial markets, and investment analysis.Thinking about becoming a Certified Financial Planner (CFP®)? Individuals and business owners need smart financial management more than ever these days, and the Economics and Finance certificate can give you the financial planning knowledge you need to help clients create a brighter financial future. This certificate will help you meet the educational criteria for in-demand professional designations like the CFP as well as the Chartered Financial Analyst (CFA®). If you're planning on taking the Canadian Securities Examination, these courses can help you with that, too.

Already working full-time? No problem. You can complete your finance and economics courses online alongside your professional and personal responsibilities. If you're keen to join the finance industry ASAP, you can finish the Economics and Finance certificate in as little as 8 months!

Ready to get the edge you need? Let's get started.

Who should take this Economics and Finance certificate?
- You want to start or accelerate a career in banking or finance
- You're a career professional who wants to prepare to qualify as a CFP or CFA
- You'd like to pursue graduate studies in economics, finance, or business administration

What will you learn while taking the Economics and Finance certificate?

You'll learn how to:
- Develop strong analytical skills through a wide range of introductory economics courses and specialized finance courses
- Build a foundation in microeconomics, macroeconomics, and monetary economics
- Understand the major concepts in finance and investments, including the time value of money, discounted cash flows, and risk and return
- Determine the mathematics of asset valuation, plus security analysis and portfolio management concepts, including:
  - equilibrium pricing relationships
  - efficient market hypothesis
  - evaluation of portfolio performance
  - modern portfolio theory
  - treasury bills and bonds
  - valuation of common stock

ECONOMICS & FINANCE

Certificate Requirements

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

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

Admission Criteria

Recommended:

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

OR

- Mature student status

AND

- CACC 110 or equivalent

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Financial Support

Awards and Bursaries
The Chang School offers both merit-based awards and need-based financial aid.

Ontario Student Assistance Program (OSAP)
This certificate program is OSAP-eligible. To learn more, visit the Student Financial Assistance website.

Questions?
Contact Client Services ce@torontomu.ca.

Required Courses

- ❑ CECN 104   Introductory Microeconomics
- ❑ CECN 204   Introductory Macroeconomics
- ❑ CFIN 300   Managerial Finance I
- ❑ CFIN 401   Managerial Finance II

Electives (select 2)

- ❑ You may only select 1 of CECN 721 or CFIN 621.
- ❑ CECN 129   Statistics for Economics I
- ❑ CECN 301   Intermediate Macroeconomics I
- ❑ CECN 504   Intermediate Microeconomics I
- ❑ CECN 506   Money and Banking
- ❑ CECN 606   International Monetary Economics
- ❑ CECN 703   Public Sector Economics
- ❑ CECN 721   International Financial Markets
- ❑ CFIN 501   Investment Analysis
- ❑ CFIN 502   Personal Financial Planning
- ❑ CFIN 510   Small Business Finance
- ❑ CFIN 512   Risk Management and Insurance
- ❑ CFIN 601   Derivatives
- ❑ CFIN 612   Retirement and Estate Planning
- ❑ CFIN 621   International Finance

ECONOMICS: FUNDAMENTALS

Certificate can be completed online.

Delivery	Online
Exam	In person
Courses	4
Length	1 to 1.5 years
Cost	$2,300–$2,600

EXPLORE THE WORLD OF ECONOMICS WITH AN ECONOMICS: FUNDAMENTALS CERTIFICATE

Build a foundation in economics and a whole world of opportunity can open up for you. Business. Government. Non-profits. All these sectors need trained economics professionals. The Chang School offers a unique Certificate in Economics: Fundamentals that will help you learn the basics of economics and boost your career prospects.

You don't need any previous economics training to thrive in this program. You can finish this economics certificate in as little as one or two semesters and complete your economics certification online, with some in-person exams. At the end of the certificate, you'll understand economics fundamentals and basic microeconomic and macroeconomic theory, and know more about different economics fields like monetary and international economics.Once you've got the key concepts and theories down, our online economics certificate offers a rich variety of electives in key subject areas like the economics of environment, human behaviour, and immigration, and even sports and sex.

This certificate, along with the advanced Certificate in Economics: Theory and Applications, will provide you with analytical skills that are in high demand in virtually every area of business and government, and the nonprofit sector.

Ready to expand your expertise? Take your economics career to the next level, today.

Who should take this Economics: Fundamentals certificate?
- You're already working in or want to work in business, government, the nonprofit sector, or the legal system and need some additional economics expertise to enhance your job performance or secure a promotion
- You don't have any economics background and want to gain foundational knowledge to help your career
- You're a university graduate with a degree in another field but want to pursue graduate studies in economics or a related field

What will you learn while taking the Economics: Fundamentals certificate?
You'll learn:
- Basic microeconomics, including concepts of supply and demand, the theory of the firm, distribution of income, business behaviour and decision-making under various market conditions
- Basic macroeconomics, including concepts of levels of national income, employment and prices, the business cycle, factors affecting economic growth, and international trade
- Critical analysis of monetary and fiscal policies

ECONOMICS: FUNDAMENTALS

Certificate Requirements

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

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

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

Admission Criteria

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

OR
- Mature student status

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Financial Support

Awards and Bursaries
The Chang School offers both merit-based awards and need-based financial aid.

Ontario Student Assistance Program (OSAP)
This certificate program is OSAP-eligible. To learn more, visit the Student Financial Assistance website.

Questions?
Contact Client Services ce@torontomu.ca.

Required Courses

- ❑ CECN 104   Introductory Microeconomics
- ❑ CECN 204   Introductory Macroeconomics

Electives (select 2)

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

- ❑ CECN 189   Mathematics for Economics I
- ❑ CECN 220   Evolution of the Global Economy
- ❑ CECN 301   Intermediate Macroeconomics I
- ❑ CECN 321   Introduction to Law and Economics
- ❑ CECN 340   The Economics of Human Behaviour
- ❑ CECN 502   Economics of Energy and Natural Resources
- ❑ CECN 504   Intermediate Microeconomics I
- ❑ CECN 506   Money and Banking
- ❑ CECN 511   Economy and Environment
- ❑ CECN 512   The Economics of Sex
- ❑ CECN 603   Economic Issues in Globalization
- ❑ CECN 640   Economics of Immigration
- ❑ CECN 722   Economic Issues in Professional Sports

ECONOMICS: THEORY & APPLICATIONS

Certificate can be completed online.

Delivery	Online
Exam	In person
Courses	4
Length	8 months to 1 year
Cost	$2,300–$3,000

TAKE YOUR ECONOMICS KNOWLEDGE TO THE NEXT LEVEL WITH AN ECONOMICS: THEORY AND APPLICATIONS CERTIFICATE

When you're ready to tackle more advanced economics concepts, The Chang School is here for you. Our unique Certificate in Economics: Theory and Applications builds on your economics fundamentals to help you understand more complex economic theory.

This kind of economics education is highly sought after in the job market these days. Businesses, government departments, and non-profit organizations all have a multitude of roles for trained economics professionals.The Economics: Theory and Applications certificate will teach you how to apply mathematical and statistical tools to a wide variety of economic and business problems. There are also many electives to choose from, allowing you to curate your education to your interest area or future career path. (Want to enter graduate studies in economics or a related field? This certificate is the perfect place to start.)

Our certificate is set up to get you into the field and working as soon as possible: you can finish the coursework in less than a year. Plus, the Economics: Theory and Applications courses can be completed online, with in-person exams, so you can manage your coursework in between work and other obligations.

Ready to gain an advanced understanding of economics and a competitive edge in the job market? Let's start now.

Who should take this Economics: Theory and Applications certificate?
- You already possess a basic foundation in economics or finished the Certificate in Economics: Fundamentals and want to build a more advanced set of knowledge and skills
- You want to focus on economic theory and quantitative methods for deeper analysis of a variety of topics, including labour economics, environmental economics, or public sector economics
- You're a university graduate with a degree in another field who wants to enter graduate studies in economics or a related field

What will you learn while taking the Economics: Theory and Applications certificate?
You'll learn how to:
- Build on your economics knowledge to gain an advanced understanding of key concepts and theories, as well as mathematical and statistical tools
- Meet your specific economics learning goals by choosing from coursework covering a wide variety of subjects, including:
  - Canadian tax policy
  - Econometrics
  - Economic growth and technological change
  - Economics of information
  - Economics of international trade
  - Environmental economics
  - Game theory
  - Industrial organization
  - Intermediate and advanced microeconomics and macroeconomics
  - International monetary economics
  - Labour economics
  - Mathematics for economics
  - Public sector economics

ECONOMICS: THEORY & APPLICATIONS

Certificate Requirements

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

**You must take 3 selections from the electives that you haven't already taken as required courses.

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

Admission Criteria

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

OR
- Mature student status

AND
- The following course or equivalent:
  - CECN 189 - Mathematics for Economics I

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Financial Support

Awards and Bursaries
The Chang School offers both merit-based awards and need-based financial aid.

Ontario Student Assistance Program (OSAP)
This certificate program is OSAP-eligible. To learn more, visit the Student Financial Assistance website.

Questions?
Contact Client Services ce@torontomu.ca.

Required Courses (select 1)

- ❑ CECN 301   Intermediate Macroeconomics I
- ❑ CECN 504   Intermediate Microeconomics I

Electives (select 3 not previously taken in Required Courses)

- ❑ CECN 230   Mathematics for Economics II
- ❑ CECN 301   Intermediate Macroeconomics I
- ❑ CECN 501   Industrial Organization
- ❑ CECN 504   Intermediate Microeconomics I
- ❑ CECN 510   Environmental Economics
- ❑ CECN 600   Intermediate Macroeconomics II
- ❑ CECN 601   Economics of Information
- ❑ CECN 605   Labour Economics
- ❑ CECN 606   International Monetary Economics
- ❑ CECN 614   An Introduction to Game Theory
- ❑ CECN 627   Econometrics I
- ❑ CECN 700   Intermediate Microeconomics II
- ❑ CECN 702   Econometrics II
- ❑ CECN 703   Public Sector Economics
- ❑ CECN 707   Economics of International Trade I
- ❑ CECN 715   Advanced Microeconomics
- ❑ CECN 803   Canadian Tax Policy
- ❑ CECN 808   Economic Growth and Technological Change
- ❑ CECN 815   Advanced Macroeconomics

EMERGENCY MANAGEMENT, THREAT & RESPONSE PLANNING

Certificate can be completed online.

Delivery	Online
Courses	4
Length	4 to 8 months
Cost	$3,200–$4,000

LEAD IN CHALLENGING TIMES WITH AN EMERGENCY MANAGEMENT, THREAT AND RESPONSE PLANNING CERTIFICATE

Every organization needs to be prepared for anything that can affect their operations. Completing a Certificate in Emergency Management, Threat and Response Planning from The Chang School is the perfect way to grow your career in an expanding industry.

Analysts with highly developed skills in disaster and emergency management are highly sought after across many public and private sectors, including businesses and other for-profit enterprises, community development organizations, disaster mitigation and recovery operations, emergency services, humanitarian agencies, and non-government organizations.This emergency management certificate can be completed online and will give you key emergency management, threat planning, and risk and continuity management skills and knowledge. Our emergency management courses will also teach you the response-planning concepts that can minimize the impact of emergencies. This program can help you work towards further certification with Emergency Management Ontario (EMO) and the Office of the Fire Marshal and Emergency Management (OFMEM) as well.

Step up to help keep organizations running smoothly during difficult times, and start your emergency management certification today.

Who should take this Emergency Management, Threat and Response Planning certificate?
- You're technically trained and want to gain knowledge and skills to pivot into a career in disaster and emergency management
- You're a recent university graduate who would like to learn more about emergency management and are considering entering the field

What will you learn while taking the Emergency Management, Threat and Response Planning certificate?
You'll learn how to:
- Lead, interact, and work within the context of emergency management settings and within the law during disasters and emergencies
- Assess threats and realities and, in response, author and implement plans for incident management mitigation, and recovery and business continuity for first and second responders, emergency managers, and their organizations
- Engage in practical emergency management scenarios, including incident management command centres and operations
- Operationalize emergency management organizational mechanisms in every stage of emergency responsiveness
- Use international methodologies for measuring, describing, and assessing emergency management activities, concepts, policies, missions, operations, and goals

EMERGENCY MANAGEMENT, THREAT & RESPONSE PLANNING

Certificate Requirements

</description><requirements>
- 4 required courses
- Cumulative grade point average (GPA) 1.67+

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

Admission Criteria

Recommended:
- Ontario Secondary School Diploma (OSSD) or equivalent
  - With 6 Grades 12 U or M credits
OR
- Mature student status

Financial Support

Awards and Bursaries
The Chang School offers both merit-based awards and need-based financial aid.

Ontario Student Assistance Program (OSAP)
This certificate program is OSAP-eligible. To learn more, visit the Student Financial Assistance website.

Questions?
Contact Client Services ce@torontomu.ca

Required Courses

- ❑ CSCI 230   Emergency Management Practice
- ❑ CSCI 232   Incident and Operations Management
- ❑ CSCI 234   Analysis of Critical Incidents
- ❑ CSCI 243   Continuity and Risk Management

ENGLISH LITERATURE & POPULAR CULTURE

Certificate can be completed online.

Delivery   Online
Courses   6
Length   8 months
Cost $3,400–$3,700

START A NEW CHAPTER WITH AN ENGLISH LITERATURE AND POPULAR CULTURE CERTIFICATE

Critical thinking. Problem-solving. Research. Writing. Gain these highly in-demand skills with a Certificate in English Literature and Popular Culture from The Chang School.

Our unique certificate will help you build a foundation in many different literary forms, from Shakespeare to pop culture. Start off your certificate with the required course, which explores how different forms of literature shape our world. Then, you can move on to the wide range of electives offered.This English certificate offers English literature courses on fairy tales and fantasies, science fiction and gothic horror. Budding romance writers may enjoy our class on the language of love, sex, and gender. Or, learn about how writing factors into history and cultural change with coursework in popular literature and writing as a cultural act. Intrigued about creativity in general? We offer online English literature courses that cover how creativity and writing work within everyday life – and can help you get started as a writer.

You'll learn how to hone your critical analysis skills, write better, and use your new creative, analytical, and communication skills to enter new fields or advance in your current career.

Already working? You can do all these English literature courses online, and complete your certificate on your own schedule and timeline.

It's time to level up your career: let's write the exciting next chapter of your story together.

Who should take this English Literature and Popular Culture certificate?
- You're employed or seeking jobs in fields that require creative knowledge and writing skills like publishing, public relations, advertising, government, film, or digital communications
- You're interested in exploring degree-credit courses in English literature and popular culture before formally applying to university
- You're looking to strengthen your application to a full-time undergraduate degree program
- You're a teacher who would like to strengthen your knowledge to help enhance your curriculum

What will you learn while taking the English Literature and Popular Culture certificate?
You'll learn how to:
- Utilize a newfound, strong knowledge in historic and contemporary literature and culture to help you experience, analyze, and create literary and cultural works

ENGLISH LITERATURE & POPULAR CULTURE

Certificate Requirements

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

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

Admission Criteria

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

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Financial Support

Awards and Bursaries
The Chang School offers both merit-based awards and need-based financial aid.

Ontario Student Assistance Program (OSAP)
This certificate program is OSAP-eligible. To learn more, visit the Student Financial Assistance website.

Questions?
Contact Client Services ce@torontomu.ca

Required Courses

- ❑ CENG 110   Literatures Across Borders

Electives (select 5)

- ❑ CENG 112   Zap, Pow, Bang: Pop Lit
- ❑ CENG 200   Writing as a Cultural Act
- ❑ CENG 208   Introduction to Non-Fiction
- ❑ CENG 222   Fairy Tales and Fantasies
- ❑ CENG 230   Creativity, Writing, and Everyday Life
- ❑ CENG 503   Science Fiction
- ❑ CENG 505   Creative Writing
- ❑ CENG 510   Gothic Horror
- ❑ CENG 511   The Art of Writing Life
- ❑ CENG 610   The Language of Love, Sex and Gender
- ❑ CENG 706   Shakespeare and Performance

ENTERING FOREIGN MARKETS

Certificate can be completed online.

Delivery	Online
Exam	In person
Courses	4
Length	2 years
Cost	$2,600–$2,700

MAKE YOUR ENTRANCE ON THE WORLD STAGE WITH AN ENTERING FOREIGN MARKETS CERTIFICATE

International expansion is an exciting time for a business. But there's also a lot to navigate: new cultural norms, different politics. And growing businesses need a skilled professional on hand to help them navigate the complex process of entering new international markets. That's where The Chang School comes in. We offer a unique Certificate in Entering Foreign Markets that will train you to become this professional – and excel in a fast-growing segment of the marketing industry.

More and more businesses are expanding beyond their original borders into international markets and our certificate provides everything you need to get started or get ahead in this exciting field. You'll start off with coursework in global management and international marketing that will show you how to effectively communicate marketing ideas and business concepts in a cross-cultural environment. Then, you can take your pick of which foreign market you want to specialize in. North America? Asia? Europe? The Middle East? We can teach you about them all.Our certificate offers flexibility, allowing you to complete courses online and on your own timeline, in between any other responsibilities.

Companies need people with the knowledge and skills to assess international markets, understand the complexities, navigate the unpredictability, and share the best entry strategies. Step up and help them make it a success, every time.

Who should take this Entering Foreign Markets certificate?
- You're a graduate in a non-business-related field who wants to gain some foundational knowledge in international business
- You're a professional who wants specialized skills in evaluating foreign markets for entry
- You're an advertising or communications professional who needs skills in effective marketing across borders
- You're a new graduate who wants to complement your degree with a certificate related to international business

What will you learn while taking the Entering Foreign Markets certificate?
You'll learn how to:
- Effectively communicate marketing ideas and business concepts in a cross-cultural environment
- Define and understand the basic functions of management
- Demonstrate an understanding of the theory and application of the "four Ps of marketing' model
- Leverage primary and secondary marketing-metric research to inform decision-making
- Formulate and implement effective cross-border marketing strategies that resonate with diverse audiences
- Identify and analyze diverse types of risks for business, including political risk
- Demonstrate specialized knowledge of the business environment in a specific global region of interest to you

Certificate Requirements

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

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

Admission Criteria

Recommended:
- Ontario Secondary School Diploma (OSSD) or equivalent
  - With six Grade 12 U or M credits
OR
- Mature student status

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Financial Support

Awards and Bursaries
The Chang School offers both merit-based awards and need-based financial aid.

Ontario Student Assistance Program (OSAP)
This certificate program is OSAP-eligible. To learn more, visit the Student Financial Assistance website.

Questions?
Contact Client Services ce@torontomu.ca

Required Courses

- ☐ CGMS 200   Introduction to Global Management
- ☐ CGMS 522   International Marketing
- ☐ CMKT 100   Principles of Marketing

Electives (select 1)

- ☐ CGMS 690   The North American Business Environment
- ☐ CGMS 691   The Asian Business Environment
- ☐ CGMS 692   The European Business Environment
- ☐ CGMS 695   The Middle Eastern Business Environment

ENTREPRENEURSHIP & SMALL BUSINESS

Includes online and in-person courses.

Delivery	Hybrid
Exam	In person
Courses	6
Length	1 to 2 years
Cost	$3,800–$3,900

SET UP YOUR SMALL BUSINESS FOR SUCCESS WITH AN ENTREPRENEURSHIP AND SMALL BUSINESS CERTIFICATE

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

Our certificate can be completed in as little as one year, and you can do your small business courses online. This way, you can continue to plan or run your business while improving your skills at the same time.Our online entrepreneurship courses will teach you about things like small-business management, entrepreneurial behaviour and strategy, and how to identify business opportunities. It also will show you how to run a new venture start-up as well. Our instructors have many real-world lessons to share and a wealth of experience, thanks to their work with Canada's largest undergraduate entrepreneurship and innovation program.

Once you finish your entrepreneurship certificate, you can use all the material you've created during your entrepreneur courses to help promote your business to financiers and investors, and run it as smoothly and profitably as possible.

Are you more of a mid-career professional? You can also use the skills gained during the entrepreneurship certificate to identify exciting new business opportunities for your next venture. You'll also be connected with opportunities within Toronto Metropolitan University's innovation eco-system, where you can learn from existing start-ups in a variety of innovation zones.

You need the right tools to make your business a success – and they're right here, waiting for you. Innovation awaits.

Who should take this Entrepreneurship and Small Business certificate?
- You're aiming to launch, or have recently launched, a small business and need to hone your business skills, including developing business and marketing plans and identifying market opportunities
- You're a business owner that wants to scale and improve your profitability and processes
- You're a manager in a medium or large public, private, or nonprofit organization who wants to more effectively promote innovative product development and marketing as a workplace intrapreneur
- You're a newcomer and want to learn the ways of Canadian entrepreneurship and small business management

What will you learn while taking the Entrepreneurship and Small Business certificate?
You'll learn how to:
- Assess your own entrepreneurial potential and managerial skills
- Identify opportunities and analyze best-fit markets for entry
- Develop your business idea into an actionable business plan
- Organize, promote, and finance a business, including bootstrap financing and government funding programs
- Assess risk and opportunity in buying an existing business or franchise
- Learn management strategies to deal with common business issues such as cash flow, high growth rates, outsourcing, and corporate governance

ENTREPRENEURSHIP & SMALL BUSINESS

Certificate Requirements

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

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

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

Admission Criteria

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

OR
- Mature student status

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Financial Support

Awards and Bursaries
The Chang School offers both merit-based awards and need-based financial aid.

Ontario Student Assistance Program (OSAP)
This certificate program is OSAP-eligible. To learn more, visit the Student Financial Assistance website.

Questions?
Contact Client Services ce@torontomu.ca

Required Courses

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

Electives (select 2)

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

- ❑ CGEN ESB   Two One-Term Courses for certificate completion (Entrepreneurship and Small Business)

ETHICS

Certificate can be completed online.

Delivery	Online
Exam	In person
Courses	6
Length	1.5 years
Cost	$3,700–$4,600

DO THE RIGHT THING WITH AN ETHICS CERTIFICATE

How can our organizations and institutions become more inclusive? More diverse? More sustainable? When it comes to creating ethical industry leaders, it takes trained professionals. And The Chang School's unique Certificate in Ethics can give you that training and help you aid organizations and institutions in becoming better corporate citizens.

Learn how to apply ethics to any role, whether it's in the public or private sector. During this Ethics certificate, you'll learn how to help organizations and institutions make intelligent, empathetic decisions and boost well-being along with the bottom line. This program can help you become a leader in any organization you choose, with colleagues and senior stakeholders looking to you in times of change and development for how to do the right thing.Ethics courses cover many kinds of ethics, including ethics in health care, business ethics, human rights and justice, bioethics and environmental ethics, and media ethics.

To ensure your ethics education is as well-rounded as possible, there are electives available in diverse subjects like law, economics, women's studies, conflict resolution, propaganda, leadership, diversity and inclusion in the workplace, and psychology.

All of our ethics courses are online, with in-person exams, and offer individual supervision by experts in the ethics field. Once you complete your certificate, you can excel in many different fields, from employment equity and policy development to administration and management.

Ethics certification will help you stand out amongst your peers as someone who's focused and committed to excellence in your industry – and trained to improve effectiveness and decision-making for your employer. Are you ready to become that professional?

Who should take this Ethics certificate?
- You're a professional looking to play a more significant role in your current or future organizations
- You're a university graduate who wants to distinguish yourself in your chosen field, or focus your research in ethics

What will you learn while taking the Ethics certificate?
You'll learn how to:
- Critically analyze approaches to ethics
- Understand the theoretical underpinnings of ethics
- Develop writing skills for clear presentation and defence of ethical policies and procedures
- Communicate in a more effective and persuasive manner

Certificate Requirements

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

**You must take 2 selections from Electives – Group A and 3 selections from Electives – Group B that you haven't already taken in Electives – Group A.

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

Admission Criteria

Required:
- Ontario Secondary School Diploma (OSSD) or equivalent
  - With 6 Grade 12 U or M credits
OR
- Mature student status

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Financial Support

The Chang School offers both merit-based awards and need-based financial aid. This certificate is not eligible for the Ontario Student Assistance Program (OSAP).

Questions?
Contact Client Services ce@torontomu.ca.

Required Course

- ☐ COPH 200 Ethics Capstone Course

Electives – Group A (select 2)

- ☐ CPHL 302 Ethics and Health Care
- ☐ CPHL 307 Business Ethics
- ☐ CPHL 400 Human Rights and Justice
- ☐ CPHL 449 Philosophy of Punishment
- ☐ CPHL 500 Philosophy of the Natural Environment
- ☐ CPHL 503 Ancient and Modern Ethics
- ☐ CPHL 509 Bioethics
- ☐ CPHL 603 Fundamentals of Ethics
- ☐ CPHL 612 Philosophy of Law
- ☐ CPHL 614 Philosophy of Human Rights

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

- ☐ CCRM 200 Criminal Law
- ☐ CCRM 322 Ethics in Criminal Justice
- ☐ CECN 321 Introduction to Law and Economics
- ☐ CECN 502 Economics of Energy and Natural Resources
- ☐ CECN 510 Environmental Economics
- ☐ CENG 621 Women's Texts, Global Contexts
- ☐ CGMS 802 Ethics and Regulation of Int'l Bus
- ☐ CINT 905 Conflict Resolution in Community Services
- ☐ CLAW 122 Business Law
- ☐ CLAW 525 The Law of the Marketplace
- ☐ CLAW 529 Employment and Labour Law
- ☐ CLAW 603 Advanced Business Law
- ☐ CMHR 600 Diversity and Inclusion in the Workplace
- ☐ CHST 602 Propaganda!
- ☐ CODG 130 Legal and Ethical Issues in GIS and Digital Data
- ☐ CPHL 302 Ethics and Health Care
- ☐ CPHL 307 Business Ethics
- ☐ CPHL 400 Human Rights and Justice
- ☐ CPHL 401 Philosophy and Mass Culture
- ☐ CPHL 500 Philosophy of the Natural Environment
- ☐ CPHL 503 Ancient and Modern Ethics
- ☐ CPHL 507 Ethics and Disability
- ☐ CPHL 509 Bioethics
- ☐ CPHL 603 Fundamentals of Ethics
- ☐ CPHL 612 Philosophy of Law
- ☐ CPHL 614 Philosophy of Human Rights
- ☐ CPOG 424 Human Rights and Global Politics
- ☐ CPPA 301 Administrative Law
- ☐ CPSY 124 Social Psychology
- ☐ CPSY 300 Psychology and Law
- ☐ CPSY 518 Environmental Psychology
- ☐ CPSY 706 Positive Psychology
- ☐ CPSY 802 Death, Dying and Bereavement
- ☐ CPSY 808 Community Psychology
- ☐ CSOC 609 Gender and Global Human Rights
- ☐ CSOC 705 Law, Justice, and Abolition

FACILITY & PROPERTY MANAGEMENT

Note: Effective Spring 2025, the certificate in Facility and Property Management has been discontinued. Learners who registered prior to February 1, 2025, should refer to the archived calendar for the curriculum details of your year of registration. You might also be interested in pursuing one of our other certificates in Occupational Health and Safety Leadership, Architecture, or Landscape Design for Climate Resistance for a similar program. For more information, contact our Client Services team at ce@torontomu.ca.

Certificate Requirements

- 6 required courses
- 2 19.5-hour courses are considered equivalent to one 39-hour course
- Cumulative grade point average (GPA) 1.67+

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

Admission Criteria

Recommended:
- Successful completion of a minimum of two-year post-secondary program

OR
- Mature student status with related professional experience and education

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Required Courses: 39-Hour Courses (select 6)

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

- ❑ CDFM 102   Facility Management Fundamentals
- ❑ CDFM 103   Project Planning, Design, and Management
- ❑ CDFM 104   Building Operations and Maintenance
- ❑ CDFM 105   Space Planning and Management
- ❑ CDFM 106   Leadership, Strategy, Business
- ❑ CDFM 107   Recruiting and Managing Employees & Procuring Contractors

19.5-Hour Courses

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

- ❑ CDFM 110   Leasing and Lease Administration
- ❑ CDFM 111   Capital and Asset Management
- ❑ CDFM 112   Risk, OHS, Regulations, and the Law
- ❑ CDFM 113   Sustainability in Facilities
- ❑ CDFM 114   Real Estate Planning and Development

FASHION INNOVATION

Certificate can be completed online.

Delivery	Online
Courses	6
Length	1.5 years
Cost	$3,900–$4,100

DESIGN YOUR CAREER IN FASHION WITH THE FASHION INNOVATION CERTIFICATE

The fashion industry is rapidly changing. The Chang School Certificate in Fashion Innovation is for people passionate about evolving the fashion industry to make it more sustainable, inclusive, and efficient.

The unique Certificate in Fashion Innovation was built in collaboration with one of the top fashion schools in the world, the School of Fashion. It provides in-depth education that will set you up for success in a wide variety of fashion-related fields, including marketing and events management; brand-building, public relations, fashion media, and styling; business analysis and management, and entrepreneurship; design management, product research and trend forecasting; direct-to-consumer, marketplace and digital selling; and merchandising, buying, wholesale sales and brand management.The Fashion Innovation certificate is all about future-proofing your skills: as the fashion industry undergoes rapid transformation, it will equip you with everything you need to stay ahead of the curve. By developing expertise in areas such as sustainability, digital innovation, diversity, research and data analysis, digital events and experiential branding, and emerging fashion systems, you'll have the skills and knowledge needed to shape the future of fashion, drive positive change, and gain a competitive advantage. You'll also complete a capstone project where you will solve a real-world problem and connect with the fashion community, preparing you to lead change in the fashion industry.

Our Fashion Innovation program stands out by providing access to industry experts who are actively working in the field. You'll benefit from the firsthand knowledge, insights, and connections these professionals bring, expanding your industry network and gaining valuable industry perspectives. Our curriculum also emphasizes real-world learning through case studies, workshops, and hands-on projects – you'll have the opportunity to apply your knowledge and skills to solve current industry challenges, developing a portfolio that showcases your expertise and sets you apart in the job market.

Whether you're already working in the industry, starting your own fashion venture, or transitioning careers, our online format enables you to pursue your education while maintaining your other commitments.

Are you ready to get started? A fulfilling career is always in fashion.

Who should take this Fashion Innovation certificate?
- You're looking for upskilling in key areas of fashion disruption, including sustainability; digital and technological innovation; meaningful and radical diversity, equity and inclusion; and emerging fashion systems
- You're a fashion entrepreneur who has started or is thinking about starting their own business
- You want to pivot into a career in fashion
- You'd like to advance in your fashion career with a post-secondary certificate credential

What will you learn while taking the Fashion Innovation certificate?

You'll learn how to:
- Understand the changing fashion landscape and business of fashion as it aligns with core consumer and corporate values, including sustainability, equality, diversity, gender fluidity, radical inclusion, and community
- Design and implement meaningful digital fashion experiences and in-person events that drive customer engagement and enhance brand loyalty
- Analyze data sets to help inform marketing and sales strategies as they apply to supply chain, consumer analytics, and trend forecasting
- Showcase your expertise with a portfolio that addresses a current issue, driving positive change in the fashion industry

Certificate Requirements

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

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

Admission Criteria

Recommended:
- Ontario Secondary School Diploma (OSSD) or equivalent
  - With 6 Grade 12 U or M credits (including English)
OR
- Continuous learners with relevant professional experience

Financial Support

The Chang School offers both merit-based awards and need-based financial aid. This certificate is not eligible for the Ontario Student Assistance Program (OSAP).

Questions?
Contact Client Services ce@torontomu.ca

Required

- ❑ CDFI 100   Events and Digital Experiences
- ❑ CDFI 200   Visually Speaking
- ❑ CDFI 300   Fashion Research and Analytics: An Introduction
- ❑ CDFI 400   Fashion Innovation Project
- ❑ CFSN 105   Fashion Systems I
- ❑ CFSN 223   Fashion Theory

FILM STUDIES

Includes online and in person courses.

Delivery	Hybrid
Courses	10
Length	1.5 years
Cost	$6,000–$6,200

RISE TO THE TOP OF THE FILM INDUSTRY WITH A FILM STUDIES CERTIFICATE

Want to pursue a career in film, television, or digital content development? A Certificate in Film Studies from The Chang School can help you score a dream job making amazing movies, TV, and online content. This certificate is an excellent starting point if you want to pursue a career in film and video production, or upgrade your skills and knowledge if you have some experience but no formal training.

We offer hands-on filmmaking experience, along with filmmaking courses in key areas like lighting design; directing screen performance; film and digital production methods and techniques; fundamentals of directing, editing, shooting and producing; production design; screenwriting; and sound design, location and post audio production techniques. We also provide key knowledge about the business of developing, producing, and marketing films. Want to start shooting? The certificate includes cinematography courses as well. All of your coursework will help you start building your professional portfolio so you'll be well-prepared to start your search for roles in Canada's multi-billion dollar film industry. You can start building your network while completing your certificate as well: all our instructors are professionals working in the industry, so they're able to teach all the latest technology and techniques, too.

Most of the certificate can be completed online, making it easy to schedule your coursework within your busy schedule. Plus, you can complete it in as little as one-and-a-half years, so you can start going after those dream jobs as soon as possible.

We're here to support you on your filmmaking journey, every step of the way.

Who should take this Film Studies certificate?
- You work in the film industry and want to improve your qualifications
- You're new to the industry and want to better understand all aspects of production
- You work in other fields and want to make a career change to enter the film industry or develop content
- You work in allied fields and want to develop film production and screen media
- You have a related education in theory, history, and criticism of film and want to make films or develop screen media production

What will you learn while taking the Film Studies certificate?
You'll learn how to:
- Master the fundamentals of directing and producing; screenwriting; picture and sound recording and editing; and film and digital production methods and techniques
- Understand the business of developing, producing, and marketing films

Certificate Requirements

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

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

Admission Criteria

Recommended:
- Ontario Secondary School Diploma (OSSD) or equivalent
  - With 6 Grade 12 U or M credits
  - With a minimum average of 60 percent
OR
- Mature student status with relevant professional experience

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Financial Support

Awards and Bursaries
The Chang School offers both merit-based awards and need-based financial aid.

Ontario Student Assistance Program (OSAP)
This certificate program is OSAP-eligible. To learn more, visit the Student Financial Assistance website.

Questions?
Contact Client Services ce@torontomu.ca

Required Courses

- ❑ CMPF 106   Film Production: Silent Film
- ❑ CMPF 206   Film Production: Sound Film
- ❑ CMPF 107   Intro to Cinematography
- ❑ CMPF 207   Introduction to Editing and Sound
- ❑ CMPF 422   Film Production
- ❑ CMPF 423   Film Technology III
- ❑ CMPF 322   Film Prod. Directing for Camera
- ❑ CMPF 301   Business of Film

Electives (select 2)

- ❑ CDMP 125   Fiction Screenwriting
- ❑ CDMP 231   Short Filmmaking: On Location
- ❑ CDMP 700   Advanced Screenwriting
- ❑ CFPN 323   Sound Design for Digital Media I
- ❑ CFPN 501   Scenography I: Art Direction
- ❑ CFPN 502   Directing Screen Performance - Basic Principles
- ❑ CFPN 531   Cinematography and Lighting Design I
- ❑ CFPN 601   Scenography II - Production Design

FINANCIAL MATHEMATICS MODELING & PREDICTIVE ANALYTICS

Note: Effective Spring 2025, the certificate in Financial Mathematics Modeling and Predictive Analytics has been discontinued. Learners who registered prior to February 1, 2025, should refer to the archived calendar for the curriculum details of your year of registration. You might also be interested in pursuing one of our other certificates in Economics and Finance; Data Analytics, Big Data and Predictive Analytics; or Practical Data Science and Machine Learning for a similar program. For more information, contact our Client Services team at ce@torontomu.ca.

Certificate Requirements

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

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

Admission Criteria

Recommended:
- Mature student status and evidence of university-level coursework in mathematics, economics, and/or finance, or equivalent as determined by the academic coordinator

OR
- Mature student status and other relevant qualifications or relevant industry experience as determined by the academic coordinator

Admission: review of your curriculum vitae via email by the academic coordinator is required for entry into this program

Send your curriculum vitae by email to:
- Academic Coordinator Sebastian Ferrando at ferrando@torontomu.ca
- Engineering, Architecture, and Science Program Director Anne-Marie Brinsmead at a2brinsm@torontomu.ca

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Required Courses

- ☐ CMTH 500   Introduction to Stochastic Processes
- ☐ CMTH 600   Computational Methods In Mathematics
- ☐ CMTH 700   Financial Mathematics I
- ☐ CMTH 800   Financial Mathematics II

FOOD SECURITY

Certificate can be completed online.

Delivery	Online
Courses	6
Length	1.5 to 2 years
Cost	$2,300–$3,200

SUPPORT OUR COMMUNITIES WITH A FOOD SECURITY CERTIFICATE

Food security is essential for everyone's health and well-being. But there's a long way to go in improving global food security for all, due to social and economic inequality, conflict, climate change, and environmental degradation.

That's why there is a rapidly growing need for passionate, qualified professionals to create and implement food security programs and policies to help achieve food security locally, nationally and globally. This is why The Chang School is proud to offer Canada's only online certificate program in food security.This program was developed with the Centre for Studies in Food Security to provide professional food-security accreditation and help raise awareness of food security issues across a wide range of professional sectors.

Many of our graduates have found the program invaluable in making career moves into sectors where food security expertise is needed. There's a wide variety of opportunities available for trained food security professionals, including in government, local and international community development, the nonprofit sector, food-system planning, regional health authorities, or even the expanding urban agriculture sector.

Our food security certificate is online, so you can complete it at your own pace. Coursework covers many different topics, both local and global, including food justice, gender and food security, food systems, climate change and food security, the politics of food, health and food security, urban food security, Indigenous food systems in Canada, and food-security research. The certificate also offers courses in urban agriculture.

The world needs more advocates to advance food justice and battle global food insecurity. Are you ready to step up to help create food-secure communities?

Who should take this Food Security certificate?
- You need a degree accreditation in food security to advance your career professionally or academically
- You're a working professional with food-security experience in public health, social work, agriculture, international development, or the food sector and want to broaden your knowledge and skill set to expand their career opportunities
- You're a degree graduate looking for a stepping stone from undergraduate studies to a master's or PhD program in food security or related studies
- You're passionate about the subject and would like to transition to careers in this field
- You're a practitioner working locally or regionally on food security in your community

What will you learn while taking the Food Security certificate?
You'll learn how to:
- Apply appropriate research and evaluation methods for assessing food security at individual, household and community levels
- Determine the prevalence of hunger and food insecurity in a population
- Use international databases and software to assess trends in food security for different countries in order to identify food crises
- Use research to inform on policy making and practice to improve food security based on a right to food perspective
- Apply new economic thinking to strengthening food security
- Design inclusive, collaborative policymaking processes for building household and community food security
- Identify the requirements for creating sustainable food systems based on social justice principles

FOOD SECURITY

Certificate Requirements

- 3 required courses
- 3 electives
- Complete a minimum of 50 percent of the courses through The Chang School
- Successfully complete your program requirements within four years of registering in the certificate
- Achieve a cumulative grade point average (GPA) 1.67+

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

Admission Criteria

Required:
- An undergraduate degree

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

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

Admission interview and placement assessment

If you wish to apply to register for the Certificate in Food Security, contact the Academic Coordinator, who will assess whether you are eligible and answer any questions you might have about the program. You can reach Reg Noble at ce@torontomu.ca. If you're interested in taking individual courses, Toronto Metropolitan University's general eligibility rules apply.

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Financial Support

The Chang School offers both merit-based awards and need-based financial aid. This certificate is not eligible for the Ontario Student Assistance Program (OSAP).

Questions?
Contact Client Services ce@torontomu.ca

Required Courses (Select 3)

- ❑ CFNY 403   Food Security Concepts and Principles
- ❑ CFNY 404   Food Policy and Programs for Food Security
- ❑ CFNY 405   Applied Research Methods and Evaluation
- ❑ CFNP 250   Markets, Food Systems/Food Policy

Electives (Select 3)

- ❑ CCLD 231   Families in Canadian Context I
- ❑ CFNP 400   Interprofessional Placement
- ❑ CFNY 400   Selected Topics in Food Security
- ❑ CFNY 407   Community Development and Food Security
- ❑ CFNY 408   Urban Food Security
- ❑ CFNY 409   Gender and Food Security
- ❑ CFNY 510   Indigenous Food Systems in Canada
- ❑ CINT 912   Community Development: International Field Experience
- ❑ CSOC 808   Sociology of Food and Eating
- ❑ CVFN 410   Understanding Urban Agriculture
- ❑ CVFN 411   Dimensions of Urban Agriculture
- ❑ CVFN 412   Practicing Urban Agriculture
- ❑ CVFN 413   Urban Agriculture Policy-Making
- ❑ CFND 401   Social and Cultural Dimensions of Food
- ❑ CFNF 100   Families and Health
- ❑ CFNN 100   Nutrition and Health
- ❑ CFNN 111   Nutrition for your Health

FOUNDATIONS FOR ACCOUNTING

Certificate can be completed online.

Delivery	Online
Exam	In person
Courses	4
Length	1.5 to 2 years
Cost	$2,700–$2,800

GET YOUR START IN ACCOUNTING WITH A FOUNDATIONS FOR ACCOUNTING CERTIFICATE

Are you ready to become a Chartered Professional Accountant (CPA)? We're excited to help you start your journey with some must-have accounting courses. The Chang School has created a four-part Certificate in Accounting Series to give you everything you need to pursue that CPA designation.

Our Accounting Certificate Series offers in-depth skills training and hands-on experience to help you master those CPA enabling competencies and give you the best possible start in your accounting certification and CPA career. (Not sure if you want to go the CPA route quite yet? This certificate will set you up for success in any career that requires in-depth accounting knowledge.)

First up is Level 1: Certificate in Foundations for Accounting.These accounting courses teach you all the basics to get started in accounting. You'll learn the foundations of accounting, business law, economics, and applied statistics for business.

Looking for online accounting courses? Good news: you can also take all our accounting courses online – with in-person exams – so you can complete the certificate at your own pace, in a timeframe that works with your current schedule.

Our accounting program prioritizes collaboration, so once you complete your accounting certificate, you'll have a robust professional network of advisors, staff, instructors, and fellow learners in place who can provide valuable support as you transition into new accounting roles.

After you've finished that first accounting certificate, the next accounting certificates in our series include:
- Level 2: Certificate in Intermediate Accounting I
- Level 3: Certificate in Intermediate Accounting II
- Level 4: Certificate in Advanced Accounting

The accounting courses in the Certificate in Foundations for Accounting qualify as preparatory courses for the CPA Professional Education Program (PEP). Once you complete all four accounting certificates, you can apply for the CPA PEP. And, after you complete the PEP, you'll be eligible to write the three-day Common Final Examination (CFE) exam.

We make the road to getting your CPA a little smoother – so let's get started today.

Who should take this Foundations for Accounting Certificate?
- You're a working professional with the goal of pivoting your career into accounting or finance and want to do accounting courses online
- You're a college or university graduate in a non-accounting field who wants to pursue the Chartered Professional Accountant (CPA) designation
- You're a newcomer to Canada who needs to take some accounting courses in Canada to build your Canadian resume and help secure a job
- You're a business owner or manager who wants to enhance your accounting knowledge

What will you learn while taking the Foundations for Accounting Certificate?
You'll get:
- Fundamental understanding of current accounting standards and procedures
- Basic business practice knowledge
- Four courses accredited by the CPA that count towards the Professional Education Program (PEP) prerequisites
- Foundational accounting methods and current business knowledge that can be applied to a business or entry-level position

Certificate Requirements

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

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

Admission Criteria

Recommended:
- Undergraduate degree
  - With 6 Grade 12 U or M credits
OR
- Mature student status

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Financial Support

Awards and Bursaries
The Chang School offers both merit-based awards and need-based financial aid.

Ontario Student Assistance Program (OSAP)
This certificate program is OSAP-eligible. To learn more, visit the Student Financial Assistance website.

Questions?
Contact Client Services ce@torontomu.ca

Required Courses

- ❑ CACC 110   Financial Accounting
- ❑ CLAW 122   Business Law
- ❑ CECN 210   Understanding Economics
- ❑ CQMS 210   Applied Statistics for Business

FOUNDATIONS OF INTERNATIONAL MANAGEMENT

Includes online and in-person courses.

Delivery	Hybrid
Courses	4
Length	1.5 to 2 years
Cost	$2,600–$2,700

DISCOVER A WHOLE NEW WORLD OF BUSINESS WITH A FOUNDATIONS OF INTERNATIONAL MANAGEMENT CERTIFICATE

The global economy. Political events. Cultural norms. Social institutions. There are so many factors in play when it comes to international management. The Certificate in Foundations of International Management offered by The Chang School provides all the need-to-know basics you require to enter this booming industry.

With this unique certificate, you can master the foundational knowledge you need to become an international management professional. Coursework covers everything from global management and the global business environment to operations management and applied mathematics for business.Our courses are filled with real-world case studies, simulations, and projects so you gain cutting-edge experience custom-made for an ever-changing industry. We also cover all the key geographic regions in the business world, so you'll be able to provide expertise in the cultural, political, and economical issues of a wide variety of areas.

Have a lot going on in your life at the moment? Don't let that hold you back from chasing your business dreams. You can complete many courses in the Certificate in Foundations of International Management online on your own timeline and schedule. Once you get your certificate, many opportunities can open up to you, including business analyst, information officer, management consultant, non-profit manager, and project manager roles.

There's a whole world of business opportunities out there – why not explore it now?

Who should take this Foundations of International Management certificate?
- You're a professional working in a trade-related government agency or international nonprofit organization and want more foundational knowledge in international management
- You're a university graduate with a degree in a related non-business field, such as political science or languages, who wants to enhance your employability at multinational organizations
- You're not ready to commit to a four-year degree program but are still interested in exploring degree-credit business courses with an international focus
- You're looking to strengthen your application to a full-time undergraduate degree program
- You're looking for a pathway to advanced skill development, such as the Certificate in Advanced International Trade Management

What will you learn while taking the Foundations of International Management certificate?
You'll learn how to:
- Practice agile thinking and strategic decision-making to compete effectively in a changing global business environment
- Define and understand the basic functions of management
- Describe the production and operations management process in the transformation of goods and services from inputs to outputs
- Apply mathematics in support of managerial decisions in various business functions

Certificate Requirements

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

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

Admission Criteria

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

OR
- Mature student status

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Financial Support

Awards and Bursaries
The Chang School offers both merit-based awards and need-based financial aid.

Ontario Student Assistance Program (OSAP)
This certificate program is OSAP-eligible. To learn more, visit the Student Financial Assistance website.

Questions?
Contact Client Services ce@torontomu.ca

Required Courses

- ❑ CGMS 200 Introduction to Global Management
- ❑ CGMS 400 The Global Business Environment
- ❑ CGMS 401 Operations Management
- ❑ CQMS 110 Applied Mathematics for Business

FULL STACK DEVELOPER

Certificate can be completed online.

Delivery	Online
Courses	4
Length	8 months
Cost	$3,800–$4,000

DEVELOP A REWARDING CAREER WITH OUR FULL STACK DEVELOPER CERTIFICATE

If you're looking for an industry bursting with high-salary opportunities, tech is it. Everyone needs full stack developers – and there's a major talent shortage. The Chang School offers a Certificate in Full Stack Developer that will give you the technical skills you need to excel in this fast-growing field. What's even better? You can take our full stack developer courses online, and you can finish the certificate in a year or less.

Our full stack developer courses offer a ton of hands-on, practical experience to set you up for success in this booming industry. There are no prerequisites for any of the courses, so you can get started right away and take the courses in any order.You'll learn how to do front-end development and production, crafting responsive web pages with full-stack tools like Unix Shell and Github. We train you in back-end development, deployment and analysis, showing you how to create and query dynamic databases using SQL and Python. Middleware and beta testing are covered in our full stack development courses, too, and you'll also boost your soft skills with training in Agile and Delivery Hybrid project management, presentation skills, and stakeholder collaboration.

Another way our full stack developer training stands out: our commitment to mentorship and peer support. We offer virtual mentor services, providing a virtual mentor for one-on-one Zoom meetings and email consultations about full stack course assignments, final projects and career advice. You can also tap into our employer network on LinkedIn – where professional developers offer career and networking support. Employers will also be present for your final course presentations to evaluate your work and to provide real-world feedback.

Let's start developing your full-stack career today.

Short on time but still looking to upgrade your technical skills? We also offer a Course Series in Full Stack Developer. This allows you to apply your completed courses towards a certificate in the future.

Who should take this Full Stack Developer certificate?
- You want to become a coder, or web or software developer
- You'd like to upskill and require new technical skills to stay current in your job
- You're a newcomer looking for Canadian credentials
- You're an employer who needs to upskill your staff in full-stack cloud-developer coding and scripting capacities
- You're returning to the workforce or preparing to switch careers and require a university credential and specialized skills

What will you learn while taking the Full Stack Developer certificate?
You'll learn how to:
- Construct fully functional websites and mobile applications from end to end, using various languages and tools
- Manage front-end development and production, creating and customizing responsive web pages using a variety of languages (like SQL and JavaScript) and tools (like Git, GitHub, and Unix Shell)
- Manage back-end development and deployment, designing a dynamic database and data store for data retrieval using SQL
- Effectively leverage middleware to achieve web development project goals, architecting the middleware in Python with support libraries like Flask from Pallets Project
- Deploy beta testing for full-stack website-related product improvement, leveraging tools, libraries, apps and various software to perform a number of tiered, technical activities required
- Build user interface (UI) and user experience (UX) interactions across front-end, middleware and back-end structures
- Master front-end, middleware and back-end development to produce and deploy digital artwork and media objects for multi-device compatible websites
- Utilize AI assistants to enhance productivity and boost coding accuracy and efficiency
- Frame effective queries and interpret AI-generated suggestions
- Augment production and overall productivity with AI Assisted Coding tools to increase code quality when debugging, troubleshooting, prototyping, testing, and deploying end-to-end full stack built websites
- Design and develop applications using 3-tier, n-tier architectures based on web technologies (React, HTML, CSS, JavaScript), middle-ware (Python with Flask) and data-stores (MongoDB, PostgreSQL) and 3rd party services
- Develop reactive user interfaces deployed on different devices
- Usage of virtual machines for development and testing environments
- Deploy Agile project management processes and functions
- Master written and visual presentation skills to communicate ideas and recommendations to internal and external stakeholders

What career support is available for you?
During your certificate, we offer extensive career help, including:
- Virtual mentor services
- Alumni networking
- Synchronous weekly online sessions
- Educator support
- Tutoring services
- Career discussion forums

Note: Effective July 1, 2024, the curriculum for the certificate in Full Stack Developer has been updated.

Learners who registered for the certificate prior to July 1, 2024 are to follow the curriculum that was in place for their year of registration. Please refer to the archived calendar for details.

Have questions? Contact our Client Services team at ce@torontomu.ca for more information.

Certificate Requirements

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

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

Admission Criteria

Recommended:
- Ontario Secondary School Diploma (OSSD) or equivalent
OR
- Mature-student status

Financial Support

The Chang School offers both merit-based awards and need-based financial aid. This certificate is not eligible for the Ontario Student Assistance Program (OSAP).

Questions?
Contact Client Services ce@torontomu.ca

Required (select 4)

- ❑ CKCS 145   Full Stack Developer
- ❑ CKCS 149   Python Programming
- ❑ CFPN 535   User Experience Design
- ❑ CFPN 542   Design for Mobile Devices

FUNDAMENTALS OF INTERIOR DESIGN

Courses can be completed online and in person.

Delivery	Hybrid
Courses	7
Length	1.5 to 2 years
Cost	$4,530–$5,500

CREATE GORGEOUS SPACES WITH A FUNDAMENTALS OF INTERIOR DESIGN CERTIFICATE

A space can always be more beautiful, more functional. Do you have the brave, bold ideas to create these better spaces? The Certificate in Fundamentals of Interior Design from The Chang School will give you the traditional and contemporary skill sets and tools you need to succeed in interior design, interior decoration, and space planning.

Our interior design courses are taught in a setting that encourages learner interaction and discussion, with instructors offering a supportive environment for you to test out your design ideas and strategies. Want to build your professional interior decorating network? You can get a head start at The Chang School. Many of our instructors are graduates of the degree interior design program and have lots of professional interior decoration experience that can enrich your learning and help you grow your network.This interior decorating program introduces you to contemporary ideas of design. The combination of lectures, activities, assignments, and hands-on demonstrations will build a foundation in space planning and the design process that will prepare you for heading out to get your first interior design job or get that promotion you've been angling for.

An Interior Design certificate can set you up for success in a wide variety of fields, including film and set design, furniture design, product design manufacturing, real estate, sales, and staging. These interior decorating courses can also boost your communication skill set, helping you to enhance any career where you need to discuss spatial and design-related work on a regular basis.

Come start your Interior Design certificate today and start creating the spaces of your dreams.

Who should take this Fundamentals of Interior Design certificate?
- You're a professional who wants to enhance your communication skills to work with designers and those in the allied construction fields
- You're a professional who works in real estate, renovations, or new build projects who wants to hone your design thinking skills to move up in their careers
- You're looking to kickstart your career in interior decorating, set design, the interior industry, facilities planning, or space planning

What will you learn while taking the Fundamentals of Interior Design certificate?
You'll learn how to:
- Improve your research and communication abilities, including rapid sketching ability, integrating analog and digital processes, concept development, and design skills that are transferable across many disciplines
- Create effective presentations
- Work with colleagues in a studio setting

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

Certificate Requirements

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

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

Admission Criteria

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

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Financial Support

The Chang School offers both merit-based awards and need-based financial aid. This certificate is not eligible for the Ontario Student Assistance Program (OSAP).

Questions?
Contact Client Services ce@torontomu.ca

Required Courses

- ❑ CDID 150   Design Theory
- ❑ CDID 151   Interior Design I: Drafting
- ❑ CDID 152   Interior Design I: Space Planning
- ❑ CIRC 112   Introduction to Digital Communication

Electives (select 3)

- ❑ CDID 153   Interior Materials and Finishes
- ❑ CDID 155   Design Dynamics I: Portfolio 1
- ❑ CDID 157   Kitchen and Bathroom Design
- ❑ CIRC 113   Introduction to Visual Communication
- ❑ CIRH 101   History of Interior Design 1850 - Present

FUNDRAISING MANAGEMENT

Certificate can be completed online.

Delivery	Online
Courses	5
Length	1 to 1.5 years
Cost	$3,600–$4,400

HELP CREATE A BRIGHTER FUTURE WITH A FUNDRAISING MANAGEMENT CERTIFICATE

Making the world a better place can often take a little bit of funding to happen. And many of Canada's 170,000+ charities are in need of financial support now more than ever, whether they're fighting food insecurity or improving sustainability. The Chang School Certificate in Fundraising Management is the perfect way to help you boost your fundraising career.

Our graduates are in high demand, and many have found meaningful work in local, national, and international non-profit fundraising roles. We provide a comprehensive introduction to fundraising, exploring philanthropy concepts and issues in Canada and around the world to help you become a leader in the non-profit sector. Our fundraising courses teach you about innovative fundraising methods and non-profit marketing. You'll also master the skill of donor recognition so your donor roster will continue to give generously for years to come.Looking to get certified? The Chang School is an Approved Provider for the Certified Fund Raising Executive (CFRE) program. Full participation in each course is applicable for 39 points in Category 1.B – Education of the CFRE International application for initial certification or recertification.

This fundraising certificate is also online, so you can balance your fundraising courses with any other responsibilities you may already have. You'll also be able to get a head start on building your professional network as you meet and collaborate with our instructors and fellow learners.

So, are you ready to help non-profits and create a community of loyal supporters? We're ready to help you get there.

Meet Our Learners

Learning from industry thought leaders, engaging in transformative discussions on new-school ideologies, and collaborating on projects with classmates nationwide enriched my perspective. The benefits included amplified hiring potential, an expanded network, and enhanced credibility in the social sector.
 — Nancy Perry Dossous

Who should take this Fundraising Management certificate?
- You're an emerging fundraising professional looking to take the next career step
- You want to make the leap into fundraising from an entirely different industry
- You're passionate about raising funds for healthcare, health and wellness, or arts and culture, or increasing resources for education, sustainability, poverty reduction, or social justice, and want to turn that into a career

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

FUNDRAISING MANAGEMENT

Certificate Requirements

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

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

Admission Criteria

Recommended:
- Ontario Secondary School Diploma (OSSD) or equivalent
  - With 6 Grades 12 U or M credits
OR
- Mature student status

Financial Support

The Chang School offers both merit-based awards and need-based financial aid. This certificate is not eligible for the Ontario Student Assistance Program (OSAP).

Questions?
Contact Client Services ce@torontomu.ca

Required Courses

- ❑ CINT 916   Principles of Fundraising
- ❑ CVFM 201   Operations of Fundraising
- ❑ CVFM 202   Current Issues in Fundraising
- ❑ CVFM 205   Data Analytics for Fundraising
- ❑ CVFM 304   Fundraising Strategies & Practices

GRAPHIC COMMUNICATIONS

Certificate can be completed online.

Delivery	Online
Courses	6
Length	8 months to 1 year
Cost	$4,000–$4,300

CREATE BETTER DESIGNS WITH A GRAPHIC COMMUNICATIONS CERTIFICATE

Your ideas. Your stories. Your voice. We live in a visual world, and The Chang School Certificate in Graphic Communications will help you learn how to turn your creative concepts into bold print and digital visual designs that captivate people's attention – and get you a job in the graphics industry. There are diverse opportunities in this field in both region and role: there's a great graphic communications job option for you, no matter what area you're most passionate about.

This certificate balances the creative and technical, exercising both your right and left brain to help you put something cohesive out into the world. With our certificate, you'll master the fundamentals of design, photo editing, and layout using industry-standard software like Adobe Creative Cloud to create materials for print, digital assets, and packaging. You can also boost your typography and accessibility skills, and sustainability knowledge.Want to understand the graphic communications process better? In our visual design courses, you'll learn how to complete each step of the process, from idea generation through to creating visual assets, laying it all out, and setting up files for both print and digital mediums, as well as understanding printing processes, binding, and distribution.

Our online program features project-based learning and industry guest speakers, with optional opportunities to get involved in production, and attend trade shows and studio and plant tours. This design certificate is also taught by instructors who already work in the industry, allowing you to start making connections in this tight-knit community right away.

Since you can complete this certificate online and in as little as eight months, you'll be able to design a beautiful career for yourself in no time.

Meet Our Learners

The courses help you integrate into industry jobs quickly and efficiently. It's benefited my career greatly as I can use the skills to show clients the kind of work I can do. It's helped me land lucrative clients, working on very creative projects that provide career satisfaction, and given me a lot of confidence as a professional.
        — Niwah Visser

Who should take this Graphic Communications certificate?
- You're considering a career change into the graphic communications industry
- You're looking to deepen your graphic communications knowledge to move up in your field
- You want to create visuals for both print and digital applications to amplify your voice in any industry
- You're applying for Toronto Metropolitan University's Bachelor of Technology in Graphic Communications Management degree

What will you learn while taking the Graphic Communications certificate?
You'll learn how to:
- Prepare layouts, files, and proofs for printed and digital output
- Use industry-standard software to integrate printed communication with online media
- Demonstrate an understanding of the impact of branding, display graphics, direct marketing materials, books, magazines, and consumer packaging
- Develop creative ideation strategies, working from creative briefs, design, and layout, using industry standard software, including Adobe Creative Cloud
- Master skills in typography, sustainability, accessibility, magazine publishing, or Adobe Photoshop via elective courses

GRAPHIC COMMUNICATIONS

Certificate Requirements

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

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

Admission Criteria

Recommended:
- Ontario Secondary School Diploma (OSSD) or equivalent
  - With 6 Grade 12 U or M credits
  - With a minimum average of 60 percent
OR
- Mature student status with relevant professional experience

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Required Courses

- ❑ CGCM 110 Introduction to Graphic Communications
- ❑ CGCM 120 Graphic Communications Processes 1
- ❑ CGCM 130 Design and Layout

Electives (select 3)

- ❑ CGCM 210 Consumer Packaging
- ❑ CGCM 230 Typography
- ❑ CGCM 260 Digital Premedia Workflows
- ❑ CGCM 720 Magazine Production and Publishing
- ❑ CGCM 738 Photoshopped! The Art of Image Retouching
- ❑ CGCM 740 Accessibility for Graphic Communications
- ❑ CGCM 746 Sustainability in Print and Packaging

HEALTH INFORMATICS

Certificate can be completed online.

Delivery	Online
Exam	In person
Courses	7
Length	1 year
Cost	$4,100–$5,300

TAKE HEALTHCARE INTO THE FUTURE WITH A HEALTH INFORMATICS CERTIFICATE

Looking to get into the rapidly expanding health informatics industry? The Certificate in Health Informatics offered by The Chang School can be completed online (depending on which electives you pick) – and in just a few terms – so you can manage your health informatics courses on your own schedule. We provide learners with a rich education in both health informatics basics and more specialized skills. First, you'll master the healthcare informatics fundamentals, including healthcare interoperability, healthcare systems, and the management cycle. Then you can delve into specialties like organizational behaviour, leadership, and big data.

We have a wide variety of health informatics courses so you can follow your passion, whether it's organizational behaviour, data analytics, project management, human-computer interfaces in healthcare, health information access and privacy, or information systems security. Our health informatics program provides simulation exercises and case studies to help learners gain as much real-world experience as possible before you graduate.The Certified Professional in Healthcare Information and Management Systems – Canada (CPHIMS-CA) credential signifies that a health informatics professional has the skills, knowledge, and abilities to perform safely and effectively in a broad range of practice settings. Gaining this certification after completing your certificate can help you get those high-paying IT roles in the booming healthcare sector.

Health informatics professionals are highly in-demand – start your career path to become one now.

Who should take this Health Informatics certificate?
- You're a healthcare professional who wishes to formalize and expand your knowledge of industry-specific uses of information technology in order to progress in your career
- You're a healthcare professional who wants academic training to meet the eligibility requirements to sit for the CPHIMS-CA Certification
- You're an IT professional who's interested in applying your technical skills within the health sector
- You're an internationally educated professional with a background in IT or the health sector who wants to better understand Canadian healthcare and health information management, and health informatics in Canada

What will you learn while taking the Health Informatics certificate?
You'll learn how to:
- Understand the role of a healthcare manager, including planning, human resource management, budgeting, service delivery, and change management
- Understand how information technology is applied in healthcare services, including electronic health records (EHR), eHealth, healthcare software applications, and healthcare data
- Apply fundamentals of human interaction with computers including mental models, multimedia user interface, network-based interactions, and visual design principles
- Demonstrate familiarity with healthcare coding terminologies, interoperability between diverse and distributed systems, and electronic data interchange standards
- Compare and contrast the various health systems operating within Canada and models for healthcare funding and planning
- Understand ethical issues as related to health information management
- Evaluate aspects of care provision, including provider-client relationships and integrated client-centred care

Certificate Requirements

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

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

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

Admission Criteria

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

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

Admission Application

You must complete a pre-approval application and receive an approval code before registering in your certificate (it's best to have your registration in place before you enrol in for your first course).

Already a TMU student or have a Google email account? Complete our Certificate Approval Code Request form and attach your required documentation.

Not yet a TMU student or don't have a Google email account? Complete our Certificate Approval Code Request (Non-Google Users) form and submit your required documentation.

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

Required Courses

- ☐ CHIM 305   Introduction to Health Informatics
- ☐ CHIM 306   Healthcare Interoperability
- ☐ CHSM 301   The Healthcare Systems
- ☐ CHSM 305   The Management Cycle

Electives (select 3)

- ☐ If you do not have a background in health information, you should complete
- ☐ CHIM 303.
- ☐ CHIM 301   Healthcare Information Analysis
- ☐ CHIM 303   Intro to Health Coding Classification
- ☐ CHIM 307   Human-Computer Interfaces in Healthcare
- ☐ CHIM 404   Introduction to Health Economics
- ☐ CHIM 408   Statistics for Health Services Managers
- ☐ CHSM 437   Human Resources Management in Healthcare
- ☐ CIND 119   Introduction to Big Data
- ☐ CIND 123   Data Analytics: Basic Methods
- ☐ CITM 207   Computer-Enabled Problem Solving
- ☐ CITM 301   IT Infrastructure
- ☐ CITM 820   Information Systems Security and Privacy
- ☐ CLAW 401   Information Access and Privacy Protection
- ☐ CLAW 402   Health Information Access and Privacy
- ☐ CMHR 405   Organizational Behaviour
- ☐ CMHR 523   Human Resources Management
- ☐ CQMS 210   Applied Statistics for Business
- ☐ CTEC 210   Fundamentals of Project Management

HEALTH SERVICES MANAGEMENT

Certificate can be completed online.

Delivery   Online
Exam   In person
Courses   7
Length   8 months to 1 year
Cost $4,100–$4,600

BECOME A HEALTHCARE LEADER WITH A HEALTH SERVICES MANAGEMENT CERTIFICATE

Healthcare management is one of the fastest-growing occupations in today's job market. Even more exciting is the endless variety of roles available in healthcare management in Canada. You can work in many different environments, including hospitals, long-term-care facilities, health clinics, and dental or medical offices. The Chang School's Certificate in Health Services Management will provide you with the key principles, skills, and experience you need to enter this rapidly growing field with confidence.

Our hyper-focused seven-course certificate makes for an easy transition into the health management industry. This healthcare management program was designed by industry experts and packed with case studies and simulations so you can get hands-on experience. By the end of the certificate, you'll have a deep understanding of healthcare management must-haves, from human-resources management and budgeting to leadership and decision-making skills.We also offer many elective options so you can determine which path works best for you. Are you more interested in long-term care service delivery? Health informatics? Managerial epidemiology? There's a fascinating specialty for everyone – and the certificate can be completed online in as little as six months, on your own time.

Ready to join this fast-growing occupation? Come start your Certificate in Health Services Management. We're here for you.

Who should take this Health Services Management certificate?
- You're a current or potential healthcare manager or leader who's looking to increase your knowledge and skills in health services to help you move up in your career
- You're a newcomer and want to take healthcare management courses in Canada to speed up your entry into the Canadian healthcare management space
- You want to study in the part-time degree completion program in Health Services Management (many of the courses in the Health Services Management certificate program are degree-credit courses and qualify for exemption)

What will you learn while taking the Health Services Management certificate?
You'll learn:
- Key foundational knowledge about how healthcare is delivered
- The responsibilities of a healthcare manager, including planning, human resource management, budgeting, service delivery, and change management
- The responsibilities of provinces and the federal government in the allocation of healthcare services, funds and coverage
- How health information is collected and used toward decision making in healthcare
- Key management principles, perspectives and functions of planning, organizing, leading, controlling and budgeting within healthcare

Certificate Requirements

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

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

Admission Criteria

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

OR
- A community college diploma in a related health services field

OR
- Mature student status

Admission Application
You must complete a pre-approval application and receive an approval code before registering in your certificate (it's best to have your registration in place before you enrol in for your first course).

Already a TMU student or have a Google email account? Complete our Certificate Approval Code Request form and attach your required documentation.

Not yet a TMU student or don't have a Google email account? Complete our Certificate Approval Code Request (Non-Google Users) form and submit your required documentation.

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

Financial Support

Awards and Bursaries
The Chang School offers both merit-based awards and need-based financial aid.

Ontario Student Assistance Program (OSAP)
This certificate program is OSAP-eligible. To learn more, visit the Student Financial Assistance website.

Questions?
Contact Client Services ce@torontomu.ca

Required Courses

- ☐ CHSM 301 The Healthcare Systems
- ☐ CHSM 305 The Management Cycle
- ☐ CHSM 407 Healthcare Financial Management
- ☐ CHSM 437 Human Resources Management in Healthcare
- ☐ CLAW 326 Law for Health Managers

Electives (select 2)

- ☐ CACC 100 Introductory Financial Accounting
- ☐ CCMN 279 Introduction to Professional Communication
- ☐ CHIM 301 Healthcare Information Analysis
- ☐ CHIM 303 Intro to Health Coding Classification
- ☐ CHIM 305 Introduction to Health Informatics
- ☐ CHIM 404 Introduction to Health Economics
- ☐ CHIM 408 Statistics for Health Services Managers
- ☐ CHSM 307 Principles of Long Term Care Service Del.
- ☐ CHSM 308 Project Management - Long Term Care
- ☐ CHSM 309 Trends in Long Term Care Service Delivery
- ☐ CHSM 310 Institutional Structure
- ☐ CHSM 330 Managerial Epidemiology for Healthcare
- ☐ CHSM 408 Program Planning and Evaluation
- ☐ CHSM 417 Research Methodology

HEALTH STUDIES

Certificate can be completed online.

Delivery	Online
Courses	6
Length	1.5 to 2 years
Cost	$3,400–$3,900

EXPAND YOUR HEALTH EXPERTISE WITH A HEALTH STUDIES CERTIFICATE

There's a whole world of health information out there for you to discover. Need to boost your knowledge or training in a few different health sectors? The Chang School's Certificate in Health Studies could be just what you're looking for.

Our Health Studies certificate provides specialized knowledge in sought-after health-related disciplines. Curate a selection of courses from our other health-related Chang School certificate programs, including Health Informatics, Health Services Management, Ethics, Psychology, and Aging and Gerontology. You'll end up with a wide breadth of professional health knowledge, along with a healthcare certificate to add to your resumé.Looking to get into the corporate side of the health sector? We offer courses in professional communication and presentations, healthcare interoperability, the management cycle, health policy, and project management.

More into psychology? Enjoy coursework about a fascinating array of subjects like the psychology of health care; drugs and human behaviour; death, dying, and bereavement; adjustment, stress, and coping; and psychological disorders.

The Health Studies certificate gives you covetable skills in tech as well, providing training in healthcare information analysis and human-computer interfaces in healthcare.

And, if one of your courses really resonates with you, then you can eventually pursue the certificate in that subject to really boost your career opportunities and skill set to the maximum. Our certificate is online, so you can complete the courses at your own pace. Plus, our instructors are keen to support you, every step of the way.

Let's begin your health education today. We're here to help you make it happen.

Who should take this Health Studies certificate?
- You'd like to transition your career into a health-related sector
- You want to learn more about health and the intersectional relationship between health and healthcare management, health information management, health ethics, gerontology, psychology, interdisciplinary studies, and communications
- You're planning on pursuing more health education and want to fill in the gaps in your health-related knowledge and skill sets

What will you learn while taking the Health Studies certificate?
You'll learn how to:
- Understand the health impacts on special populations, specific sectors, and services designed to support healthy living

Certificate Requirements

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

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

Admission Criteria

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

OR
- A related professional development award

OR
- Mature student status

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Financial Support

Awards and Bursaries
The Chang School offers both merit-based awards and need-based financial aid.

Ontario Student Assistance Program (OSAP)
This certificate program is OSAP-eligible. To learn more, visit the Student Financial Assistance website.

Questions?
Contact Client Services ce@torontomu.ca

Required Course

- ❑ CHSM 301 The Healthcare Systems

Electives (select 5)

You may only select one of CCMN 279 or CCMN 314.
You may only select one of CPHL 302 or CPHL 509.
You may only select one of CPSY 102 or CPSY 105.

- ❑ CCMN 279 Introduction to Professional Communication
- ❑ CCMN 314 Professional Presentations
- ❑ CHIM 301 Healthcare Information Analysis
- ❑ CHIM 303 Intro to Health Coding Classification
- ❑ CHIM 305 Introduction to Health Informatics
- ❑ CHIM 306 Healthcare Interoperability
- ❑ CHIM 307 Human-Computer Interfaces in Healthcare
- ❑ CHIM 408 Statistics for Health Services Managers
- ❑ CHSM 305 The Management Cycle
- ❑ CHSM 330 Managerial Epidemiology for Healthcare
- ❑ CHSM 437 Human Resources Management in Healthcare
- ❑ CINT 904 Health Promotion and Community Development
- ❑ CINT 930 Aging: From Cells to Society
- ❑ CINT 935 Ethical/Legal Frameworks in Aging
- ❑ CINT 945 Technology and Aging Populations
- ❑ CLAW 402 Health Information Access and Privacy
- ❑ CPHL 302 Ethics and Health Care
- ❑ CPHL 509 Bioethics
- ❑ CPHL 602 Health Policy: Ethics and Justice
- ❑ CPSY 102 Introduction to Psychology I
- ❑ CPSY 105 Perspectives in Psychology
- ❑ CPSY 325 Psychological Disorders
- ❑ CPSY 605 Psychology of Health and Health Care
- ❑ CPSY 607 Drugs and Human Behaviour
- ❑ CPSY 802 Death, Dying and Bereavement
- ❑ CPSY 805 Adjustment, Stress and Coping
- ❑ CPSY 808 Community Psychology
- ❑ CTEC 210 Fundamentals of Project Management

HUMAN RESOURCES MANAGEMENT

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

Effective Fall 2024, the certificate in Human Resources Management (HRM) has been discontinued. For active related programs, explore our postgraduate certificates in Human Resources Management, Advanced Human Resources Management or People Analytics for HR professionals.

Learners who registered prior to July 1, 2024, should refer to the archived calendar for the curriculum details of your year of registration. For more information, contact our Client Services team at ce@torontomu.ca.

Certificate Requirements

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

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

Admission Criteria

Recommended:
- Ontario Secondary School Diploma (OSSD) or equivalent
  - With 6 Grade 12 U or M credits
OR
- Mature student status with relevant professional experience in business

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

Required Courses

- ☐ CMHR 405 Organizational Behaviour
- ☐ CMHR 523 Human Resources Management

Electives (select 4)

- ☐ CLAW 529 Employment and Labour Law
- ☐ CMHR 522 Union Management Relations
- ☐ CMHR 600 Diversity and Inclusion in the Workplace
- ☐ CMHR 623 Recruitment and Selection
- ☐ CMHR 671 Human Resources Information Systems
- ☐ CMHR 711 Occupational Health and Safety
- ☐ CMHR 733 Training and Development
- ☐ CMHR 749 Compensation Management
- ☐ CMHR 849 Human Resources Planning

HUMAN RESOURCES MANAGEMENT

Certificate can be completed online.

Delivery	Online
Courses	5
Length	1.5 to 2 years
Cost	$3,900–$4,200

EMBARK ON A REWARDING CAREER IN HR WITH A HUMAN RESOURCES MANAGEMENT POSTGRADUATE CERTIFICATE

As a human resources (HR) professional, you can drive real, positive change in the workplaces of the world. Want to empower employees to really thrive? HR specialists are highly in demand these days – and the industry-expert-designed Postgraduate Certificate in Human Resources Management offered by The Chang School will pack your toolkit with the must-have skills and experience you need to take full advantage of the many types of roles you can enjoy in this rapidly growing sector.Our program is designed to be as flexible as possible, allowing you to create a work/life balance that works for you. You can finish this postgraduate certificate in as little as one year, helping you boost your career as soon as possible.

In addition to key HR skills and knowledge, you'll learn foundational project management, interpersonal communication, negotiation, and analysis skills. This certificate can also help you get started on the path toward the Human Resources Professionals Association (HRPA) Certified Human Resources Professional (CHRP) designation or Certified Human Resources Leader (CHRL) designation.

You'll be able to build connections and network, graduating with a strong professional network of fellow learners and our industry-expert instructors. Our instructors will provide you with all the knowledge you need to master the core competencies of HR roles, from recruitment and organizational behaviour to finance and occupational health and safety. Everything you'll learn is 100% practical – we designed the program with industry experts, basing everything on the day-to-day real-world issues you'll tackle in your growing career.

Are you ready to thrive in the growing HR industry? We're here to help you in this new career adventure, every step of the way.

Who should take this Human Resources Management postgraduate certificate?
- You're an HR professional who wants to build your confidence, validate your existing skills and upgrade your professional toolkit for your next career step
- You're an HR professional who wants to obtain your CHRP or CHRL designation
- You're not working in HR but would like to embark on a new career
- You're an internationally educated professional who requires Canadian-focused HR knowledge and a Canadian credential to enhance your employability
- You're working in a business role and require further education to pivot to a specialty in HR
- You're a manager taking on new responsibilities, or a small business owner who's overseeing aspects of HR for your business

What will you learn while taking the Human Resources Management postgraduate certificate?
You'll learn how to:
- Understand and apply core HR management principles and practices
- Analyze the financial impact of HR decisions on organizational performance
- Design effective recruitment and selection processes that incorporate equity
- Ensure compliance with occupational health and safety regulations
- Understand individual and group behaviour within organizations

HUMAN RESOURCES MANAGEMENT

Certificate Requirements

- 5 required courses

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

Admission Criteria

- Undergraduate degree or a combination of equivalent professional experience and education

For complete details, check Curriculum Advising.

Note: This certificate is not post-graduation work permit (PGWP) eligible.

Required Courses

- ❑ CYPG 640   Human Resources Management
- ❑ CYPG 641   Organizational Behaviour
- ❑ CYPG 642   Financial Foundations
- ❑ CYPG 643   Recruitment & Selection
- ❑ CYPG 644   Occupational Health & Safety, & Wellness Management

INDIGENOUS CHILD & YOUTH ENGAGEMENT

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

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

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

Industry and Careers
This certificate can help you build the skills you need to pursue opportunities in the following areas and jobs:
· Community-based youth and family work
· Community outreach
· Family support worker
· Youth justice worker School-based child and youth work
· Child and youth counsellors

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

Who Should Take This Certificate?
· Indigenous child and youth workers who are currently employed or volunteering in youth work with an Indigenous-led organization.

What Will You Learn?
· Explore life-space youth work practice and gain perspectives on healing and therapeutic experiences for young people.
· Understand the design, implementation, and evaluation of youth-centered community-based programs.
· Use a range of culturally appropriate strategies to engage young people in Indigenous contexts.
· Translate ideas and approaches from your learnings and apply them directly to your practice within your own community.

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

INDIGENOUS CHILD & YOUTH ENGAGEMENT

Certificate Requirements

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

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

Admission Criteria

Recommended:
- Indigenous continuous learners with relevant professional experience

OR
- Indigenous learners with an Ontario Secondary School Diploma (OSSD) or equivalent
  - With six Grade 12 U or M credits (including English)
  - With a minimum average of 60 percent

If you're interested in this certificate but unsure about eligibility, please email Nicole Ineese-Nash, Academic Coordinator, at nicole.ineesenash@torontomu.ca.

Required Courses

- ❑ CCYC 405   Therapeutic Foundations
- ❑ CCYC 406   Therapeutic Life-Space

Required Experiential Courses

- ❑ CVCY 300   Experiential Learning 1
- ❑ CVCY 400   Experiential Learning 2

INDIGENOUS KNOWLEDGES & EXPERIENCES

Certificate can be completed online.

Delivery	Online
Courses	4
Length	8 months to 1 year
Cost	$2,400–$3,200

CREATE POSITIVE, MEANINGFUL CHANGE WITH AN INDIGENOUS KNOWLEDGES AND EXPERIENCES CERTIFICATE

Indigenous Peoples – including First Nations, Inuit, and Métis peoples – are the original inhabitants of the land that is now known as Canada. These communities have distinct cultural, linguistic, and historical backgrounds and are recognized as unique and diverse nations with a rich heritage and ongoing contributions to Canadian society.

Indigenous Peoples persistently encounter challenges in crucial areas like healthcare, social services, employment, and education. So, how can professionals help bring about meaningful change? The Chang School is proud to offer the Certificate in Indigenous Knowledges and Experiences, a unique, award-winning program that will help you be a part of the positive way forward.This certificate can open up a wide variety of job opportunities in community workplaces and professional disciplines that engage with Indigenous communities, agencies, and people, and public- and private-sector fields like social work, health sciences, education, policy, law, geography, human resources, and community leadership.

You can complete our courses online, building knowledge and growing your career in crucial areas such as Indigenous health and well-being, governance, literature, community relations, and land use in Canada. Our comprehensive program is open to Indigenous and non-Indigenous learners and is designed to provide an enriching and diverse learning experience where you can gain new insights around Indigenous worldviews, and ways of knowing, being, and doing.

This Indigenous certificate program emphasizes the importance of practical, real-world experience; you will manage projects that contribute to positive change and help you engage with community agencies and organizations, preparing you for the challenges and complexities of working with Indigenous communities. You will also have the opportunity to connect with professionals, experts, and fellow learners who share a passion for Indigenous issues; these networking opportunities can lead to valuable connections, collaborations, and mentorship, further boosting your career.

The world needs more people to embrace making meaningful change. Join them today.

Who should take this Indigenous Knowledges and Experiences certificate?
- You work in or want to advance your career in fields and professional disciplines that engage with Indigenous communities and agencies, including social work, health sciences, education, policy, law, geography, human resources, or community leadership
- You want to work in an occupation that addresses, or should address, Indigenous concerns in public, private, and not-for-profit sector organizations

What will you learn while taking the Indigenous Knowledges and Experiences certificate?

You'll learn how to:
- Build and apply your critical awareness of yourself in relation to Indigenous Peoples, experiences, and worldviews
  Assess and understand the relationship between Indigenous Peoples and the Canadian government
- Synthesize and communicate how Indigenous Peoples have been impacted by laws, policies, and practices in the health, social services, human resources, and other sectors
- Execute projects within community agencies and organizations
- Develop a foundational understanding of Indigenous approaches to professional development

Certificate Requirements

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

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

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

Admission Criteria

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

Note: If you do not meet the stated admission criteria, you may seek advice and assistance from Spanning the Gaps – Access to Post-Secondary Education. You can also consult Gdoo-maawnjidimi Mompii Indigenous Student Services.

Required Courses

- ☐ CINT 922   Introduction to Indigenous Worldviews
- ☐ CINT 923   Canada's Story: An Indigenous Perspective

Electives (select 2)

- ☐ CCLD 450   Indigenous Early Learning
- ☐ CCYC 905   An Indigenous Perspective on CYC
- ☐ CMWF 108   Aboriginal Childbearing
- ☐ CENG 203   The Literature of Indigenous Peoples
- ☐ CENG 511   The Art of Writing Life
- ☐ CNPF 574   Aboriginal Visual Culture in Canada
- ☐ CFNY 510   Indigenous Food Systems in Canada
- ☐ CSWP 933   Indigenous Health and Well Being
- ☐ CINT 910   Indigenous Peoples, Pol and Reconciliation
- ☐ CPPA 124   Indigenous Politics and Governance
- ☐ CSWP 925   Strong Helpers' Teachings
- ☐ CVSW 932   Indigenous Knowledges in Practice

INFORMATION SYSTEMS MANAGEMENT

Certificate can be completed online.

Delivery	Online
Exam	In person
Courses	6
Length	1 to 1.5 years
Cost	$4,800–$5,000

MASTER THE ART OF INFORMATION SYSTEMS WITH AN INFORMATION SYSTEMS MANAGEMENT CERTIFICATE

Information systems are everywhere. Computers, the Internet, wireless communications, databases – together they form the backbone of modern society. Companies need smart, savvy information technology (IT) managers to help them develop, master, and maintain these computer information systems and keep everything running smoothly and efficiently.

The Chang School Certificate in Information Systems Management can help you start or boost your systems management career, setting you up for success in one of the most high-demand industries out there.This certificate will train you in areas like business information systems, computer-enabled problem-solving, IT infrastructure, systems analysis and design, and data and information management. Mastering these information management system skills will help you apply for a wide range of IT management roles, from app developer and database administrator to information security analyst and search engine optimization specialist.

You can also train in complementary information systems management skill sets, whether it's programming, network administration, or e-business.

The information technology certificate courses are delivered online, with in-person exams, so you can take them on your schedule, alongside your other commitments. Plus, you can complete the program in as little as one year. Thinking about another kind of IT management? This certificate is the perfect stepping stone to a more specialized role.

Great IT managers are in demand: it's time to build your IT career today.

Who should take this Information Systems Management certificate?
- You're looking to get into the IT management field
- You want to transition to a more specialized certificate or to the Business Technology Management degree program

What will you learn while taking the Information Systems Management certificate?

You'll learn how to:
- Manage business information systems, data representation and processing, and data management systems
- Understand key concepts, techniques, and methodologies relevant to developing information systems (IS) and IT infrastructure
- Master the fundamentals of today's IT management, from data presentation and data processing to data communication and network security

INFORMATION SYSTEMS MANAGEMENT

Certificate Requirements

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

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

Admission Criteria

Recommended:
- Ontario Secondary School Diploma (OSSD) or equivalent
  - With 6 Grade 12 U or M credits
OR
- Mature student status

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising

Financial Support

Awards and Bursaries
The Chang School offers both merit-based awards and need-based financial aid.

Ontario Student Assistance Program (OSAP)
This certificate program is OSAP-eligible. To learn more, visit the Student Financial Assistance website.

Questions?
Contact Client Services ce@torontomu.ca

Required Courses

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

- ❑ CITM 100   Foundations of Information Systems
- ❑ CITM 102   Business Information Systems
- ❑ CITM 207   Computer-Enabled Problem Solving
- ❑ CITM 301   IT Infrastructure
- ❑ CITM 305   Systems Analysis and Design
- ❑ CITM 500   Data and Information Management

Electives (select one)

- ❑ CITM 200   Fundamentals of Programming
- ❑ CITM 315   Network Administration
- ❑ CITM 350   Concepts of e-Business
- ❑ CITM 550   Advanced e-Business

INTERMEDIATE ACCOUNTING I

Certificate can be completed online.

Delivery	Online
Exam	In-person
Courses	4
Length	1.5 to 2 years
Cost	$2,700–$2,800

BUILD YOUR ACCOUNTING SKILLS WITH AN INTERMEDIATE ACCOUNTING I CERTIFICATE

Ready to take the next step into intermediate accounting? We're here for you. The Chang School's four-part Certificate in Accounting Series is the perfect way to set yourself up for success as a CPA in the accounting field.

The Certificate in Intermediate Accounting I is the second in a four-part certificate series:
- Level 1: Certificate in Foundations for Accounting
- Level 2: Certificate in Intermediate Accounting I
- Level 3: Certificate in Intermediate Accounting II
- Level 4: Certificate in Advanced Accounting

Our Accounting Certificate Series offers in-depth skills training and hands-on experience to help you master those CPA enabling competencies and give you the best possible start in your accounting certification and CPA career. (Not sure if you want to go the CPA route quite yet? This certificate will set you up for success in any career that requires in-depth accounting knowledge.)

Just like with our Certificate in Foundations for Accounting, you can do all your accounting courses online – with in-person exams – so you can complete all the accounting certificates at your own pace and on your own schedule.

The Level 2: Certificate in Intermediate Accounting I will build on the accounting courses that you've taken previously. This accounting certificate will give you expertise in intermediate accounting areas like advanced business law and business information systems.Looking to take your accounting skills to the C-suite? You'll also master managerial finance and management accounting.

You'll receive plenty of support along the way in this accounting program as well. You can start building your professional network before you even enter the accounting field, thanks to all the connections you'll make with advisors, staff, and instructors, along with your fellow future CPAs.

The accounting courses in the Certificate in Intermediate Accounting I qualify as preparatory courses for the CPA Professional Education Program (PEP). Once you complete all four accounting certificates, you can apply for the CPA PEP. And, after you complete the CPA PEP prerequisites, you'll be eligible to write the three-day Common Final Examination (CFE) exam.

You're off to a great start on your CPA journey – and we're excited to help you with that next step.

Who should take this Intermediate Accounting I certificate?
- You're a working professional with the goal of pivoting your career into accounting or finance and want to take accounting courses
- You're a college or university graduate in a non-accounting field who wants to pursue the Chartered Professional Accountant (CPA) designation
- You're a newcomer who needs to take accounting courses in Canada to build your Canadian resume
- You're a business owner or manager who wants to enhance your accounting knowledge

What will you learn while taking the Intermediate Accounting I certificate?
You'll get:
- Key CPA skills in management accounting, finance, other general business topics and data analytics and information systems
- Three courses accredited by the CPA that count towards the PEP prerequisite
- A foundation in financial and managerial knowledge and business confidence in relevant practice areas

INTERMEDIATE ACCOUNTING I

Certificate Requirements

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

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

Admission Criteria

Completion of Level 1 in the Accounting Certificate Series.
Recommended:
OR
- Ontario Secondary School Diploma (OSSD) or equivalent
  - With 6 Grade 12 U or M credits
- Mature student status

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising

Financial Support

Awards and Bursaries
The Chang School offers both merit-based awards and need-based financial aid.

Ontario Student Assistance Program (OSAP)
This certificate program is OSAP-eligible. To learn more, visit the Student Financial Assistance website.

Questions?
Contact Client Services ce@torontomu.ca

Required Courses

- ❑ CACC 410   Management Accounting
- ❑ CLAW 603   Advanced Business Law
- ❑ CFIN 300   Managerial Finance I
- ❑ CITM 102   Business Information Systems

Test Certificate Required Courses

- ❑ CACC 110   Financial Accounting
- ❑ CLAW 122   Business Law
- ❑ CECN 210   Understanding Economics
- ❑ CQMS 210   Applied Statistics for Business

INTERMEDIATE ACCOUNTING II

Certificate can be completed online.

Delivery	Online
Exam	In-person
Courses	4
Length	1.5 to 2 years
Cost	$2,300–$2,400

EVOLVE YOUR ACCOUNTING EXPERIENCE WITH AN INTERMEDIATE ACCOUNTING II CERTIFICATE

Are you ready to continue your journey to Chartered Professional Accountant (CPA) accreditation? Our Level 3: Certificate in Intermediate Accounting II will help you deepen your accounting knowledge even further and keep building your industry expertise. This is the third certificate in The Chang School's four-part certificate series:

- Level 1: Certificate in Foundations for Accounting
- Level 2: Certificate in Intermediate Accounting I
- Level 3: Certificate in Intermediate Accounting II
- Level 4: Certificate in Advanced Accounting

Our Accounting Certificate Series offers in-depth skills training and hands-on experience to help you master those CPA enabling competencies and give you the best possible start in your accounting certification and CPA career. (Not sure if you want to go the CPA route quite yet? This certificate will set you up for success in any career that requires in-depth accounting knowledge.)

The Intermediate Accounting II Certificate will build on the fundamental knowledge and specialized skills you built in your Level 1 and Level 2 accounting certificates. In this certificate, you'll take your must-have accounting skills to the next level, mastering financial accounting and managerial finance. You'll also gain experience in intermediate cost and management accounting. We value the soft skills, too, so you'll also learn valuable communication, critical thinking, and problem-solving skills, and writing strategies, via case analysis.All these courses can be completed online (with in-person exams), so you can complete your certificate in accounting on your own schedule and timeline.

The accounting courses in the Certificate in Intermediate Accounting II qualify as preparatory courses for the CPA Professional Education Program (PEP). Once you complete all four accounting certificates, you can apply for the CPA PEP. And, after you complete the PEP, you'll be eligible to write the three-day Common Final Examination (CFE) exam.

You're well on your way to completing your accounting certification and CPA prep: now let's take the next step together.
 Who should take this Intermediate Accounting II certificate?
- You're a working professional with the goal of pivoting your career into accounting or finance and want to do accounting courses online
- You're a college or university graduate in a non-accounting field who wants to pursue the CPA designation
- You're a newcomer to Canada who wants to take an accounting certificate in Canada to build your Canadian resume and help secure a job
- You're a business owner or manager who wants to enhance your accounting knowledge

What will you learn while taking the Intermediate Accounting II certificate?
You'll get:
- Key CPA intermediate-level skills and enabling competencies in financial reporting, finance, and management accounting
- Communication, critical thinking, and problem-solving skills and writing strategies via extensive case analysis
- Four courses accredited by the CPA that count towards the PEP prerequisite

Note: There has been a recent curriculum change. If you registered in the certificate prior to July 2, 2023, you can find curriculum details of your year of registration at the archived calendar. If you're considering following the revised curriculum and would like help in reviewing your options, reach out to our Client Services team at ce@torontomu.ca.

Certificate Requirements

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

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

Admission Criteria

Completion of Levels 1 and 2 in the Accounting Certificate Series.
Recommended:
OR

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

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Financial Support

Awards and Bursaries
The Chang School offers both merit-based awards and need-based financial aid.

Ontario Student Assistance Program (OSAP)
This certificate program is OSAP-eligible. To learn more, visit the Student Financial Assistance website.

Questions?
Contact Client Services ce@torontomu.ca

Required Courses

- ❑ CFIN 401   Managerial Finance II
- ❑ CACC 450   Intermediate Financial Accounting I
- ❑ CACC 550   Intermediate Financial Accounting II
- ❑ CACC 801   Intermediate Cost & Management Accounting

INTRODUCTION TO COMMUNITY SERVICES

Certificate can be completed online.

Delivery	Online
Courses	4
Length	4 months to 1 year
Cost	$2,300–$3,200

FOSTER COMMUNITY COLLABORATIONS WITH AN INTRODUCTION TO COMMUNITY SERVICES CERTIFICATE

Have you ever wanted to make a difference in your community but aren't sure where to start? Community services have never been more important and a Certificate in Introduction to Community Services from The Chang School is the perfect way to kickstart a meaningful career in this sector.

You'll learn how to work collaboratively to assess needs, and plan and evaluate community projects through case-based learning and analysis. You'll also learn about key issues and life experiences affecting contemporary families and community life, and how community services can become more in tune with the needs of Indigenous communities, older adults, children, and youth.Our certificate is fully online, so you can complete your community services courses at your own pace and on your own schedule so you don't have to worry about choosing between work and school.

Looking to transition into community services from a related field or become a community services manager? You can also customize your community services courses to upskill in different expertise areas you may need, from conflict resolution and disability issues to local economic development and health promotion.

We're here to help you begin your journey, so start your Introduction to Community Services certificate, today.

Who should take this Introduction to Community Services certificate?
- You have experience in the community services sector locally or internationally but want additional training
- You want to change careers and develop new skill sets in the community services sector
- You're a recent graduate who's looking to work in the community services sector

What will you learn while taking the Introduction to Community Services certificate?
You'll learn how to:
- Work on the front line, in policy and advocacy, and as an educator to support the health and social needs of individuals, groups, and communities
- Build strong communities using a holistic and culturally responsive approach across a range of interdisciplinary fields within the community services sector, including food security, aging and gerontology, and community engagement
- Collaborate to meet community needs by seeking novel and life-changing solutions to social problems in diverse community-based settings

Certificate Requirements

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

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

Admission Criteria

Recommended:
- OSSD with six Grade 12 U or M credits (including English), with a minimum average of 60 percent, or equivalent
OR
- Mature student status with relevant work experience

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Financial Support

Awards and Bursaries
The Chang School offers both merit-based awards and need-based financial aid.

Ontario Student Assistance Program (OSAP)
This certificate program is OSAP-eligible. To learn more, visit the Student Financial Assistance website.

Questions?
Contact Client Services ce@torontomu.ca

Required Course

- ❑ CINT 920   Community Collaborations

Food Security Stream (select 3)

- ❑ CFNY 403   Food Security Concepts and Principles
- ❑ CFNY 408   Urban Food Security
- ❑ CFNY 510   Indigenous Food Systems in Canada

Aging & Gerontology Stream (select 3)

- ❑ CINT 901   Gerontology: Critical Issues and Future Trends
- ❑ CINT 930   Aging: From Cells to Society
- ❑ CINT 945   Technology and Aging Populations

Community Engagement Stream (select 2)

Select 2 electives from this stream and 1 elective from another stream or a general elective.
- ❑ CSWP 934   Community Engagement Foundations
- ❑ CSWP 936   Community Engagement Practices

General Elective

Select any 3 electives across any stream or general electives.
- ❑ CCLD 231   Families in Canadian Context I
- ❑ CINT 902   Disability Issues
- ❑ CINT 904   Health Promotion and Community Development
- ❑ CINT 905   Conflict Resolution in Community Services
- ❑ CINT 907   Team Work for Community Services
- ❑ CPLE 795   Local Economic Development Fundamentals

LANDSCAPE DESIGN FOR CLIMATE RESILIENCE

Certificate can be completed online.

Delivery	Online
Courses	4
Length	8 months to 1.5 years
Cost	$4,200–$5,000

CREATE MORE SUSTAINABLE LANDSCAPES WITH A LANDSCAPE DESIGN FOR CLIMATE RESILIENCE CERTIFICATE

The landscape industry is rapidly prioritizing much-needed climate resilience, and The Chang School Certificate in Landscape Design for Climate Resilience will help you learn how to create these sustainable landscape design projects and grow your landscape planning expertise for a growing field.

There are plenty of exciting job opportunities across a variety of sectors. In the private sector, you can get landscape designer roles in international and national construction and condominium companies, and landscaping businesses of all sizes. Certification can also help you gain public-sector employment in government departments at the federal, provincial, state, municipal and local levels, along with non-profit nature conservancy agencies.Complete your landscaping courses online and learn how to handle landscape design challenges with real-life solutions that are resilient, ecologically based, and socially inclusive. Our landscape design courses give you comprehensive knowledge and skills in building resilience into landscape design and management, as well as how to incorporate ecologically-based plant knowledge and use digital design software. Want to get a head-start on your industry networking? The certificate automatically gives you membership with Landscape Ontario.

This landscaping program fulfills the educational requirements to enter the Certified Landscape Designer (CLD) accreditation program offered by the Canadian Nursery and Landscape Association through provincial landscape industry organizations, along with the essential knowledge, skill, and competencies required for entry to the professional certification program provided by U.S. state landscape industry associations.

Plant the seed for a fulfilling career today.

Meet Our Learners

More and more employers and clients are looking for professionals with expertise in creating resilient landscapes. The certificate gave me the knowledge and confidence to start my career in the field. Its focus on ecology and addressing the climate emergency through effective design provides an important and timely advantage.
— Tullia Marcolongo

Who should take this Landscape Design for Climate Resilience certificate?
- You want to gain the core educational requirements needed to become a CLD through provincial and U.S. state landscape industry organizations
- You have a non-landscape undergraduate degree and want to use this program as a stepping-stone to a master's program in landscape architecture
- You're an architect, interior designer, or other environmental design professional who's interested in expanding the scope of your professional work
- You're an off-shore accredited landscape architect looking to gain Canadian landscape knowledge

What will you learn while taking the Landscape Design for Climate Resilience certificate?
You'll learn how to:
- Assess and use digital design software, such as SketchUp Suite and LayOut, REVIT, DynaScape, Vectorworks, Adobe Photoshop, Adobe Illustrator, and Autodesk Civil 3D, to produce different types of landscape drawings, including functional diagrams, concept drawings, master plans, detailed design development, and working drawings
- Incorporate plant ecology knowledge into the development of planting design for climate resilience
- Develop grading and drainage designs to address runoff on urban sites related to climate change
- Generate landscape implementation and management strategies to enhance landscape resilience and sustainability
- Produce societally inclusive and resilient landscapes by integrating cultural and ecological landscape restoration techniques
- Enhance landscape inclusivity by integrating Indigenous teachings and perspectives into landscape design

LANDSCAPE DESIGN FOR CLIMATE RESILIENCE

Certificate Requirements

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

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

Admission Criteria

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

OR
- Mature student status with relevant work experience

Required Courses

- ❑ CKLA 310   Landscape Construction, Materials and Methods
- ❑ CKLA 320   Plant Materials
- ❑ CKLA 330   Landscape Design Studio

Electives (select 1)

- ❑ CKLA 400   Ecology and Sustainable Landscapes
- ❑ CKLA 420   Art and Management of Planting Design
- ❑ CKLA 450   Landscape Restoration

LEAN SIX SIGMA GREEN BELT

Certificate can be completed online.

Delivery	Online
Courses	4
Length	1 to 1.5 years
Cost	$3,900–$4,200

BECOME A STRONGER LEADER AND MAXIMIZE YOUR CAREER OPPORTUNITIES WITH A LEAN SIX SIGMA GREEN BELT

The Lean Six Sigma Green Belt certificate is a great opportunity to expand your leadership expertise, no matter where you are in your journey. Whether you'd like to take your continuous improvement career to the next level or gain highly transferable problem-solving skills, this program will help you get there. Lean Six Sigma certified leaders are always in high demand, so open the door to well-paying roles and leadership positions with The Chang School Postgraduate Certificate in Lean Six Sigma Green Belt.

This Lean Six Sigma Green Belt certificate will help you develop the knowledge, skills and experience you need to optimize your organization's operations, increase efficiency, reduce waste, and improve product and service quality. You'll also hone your data collection and analysis abilities, project management skills, and change management techniques; and learn Lean processes.We have collaborated with top employers and Lean Six Sigma subject matter experts and practitioners to ensure our Lean Six Sigma learning experience prioritizes real-world scenarios and practical learning with hands-on activities and assessments. You will learn skills you can start using right away from our expert team of Lean Six Sigma Black and Master Belts, and complete a Green Belt Level project to showcase in your portfolio. You'll also have the opportunity to earn a Lean Six Sigma Green Belt Certification as part of the final course in the certificate.

Life is busy, so our Lean Six Sigma certificate courses are delivered completely online, allowing you to balance work and personal commitments – and you can finish it in as little as eight months.

So what are you waiting for? It's time to level up and start your Lean Six Sigma Green Belt journey today.

Who should take this Lean Six Sigma Green Belt certificate?
- You're an early- to mid-career professional who has three to six years of experience in the continuous improvement and quality space who wants to gain Lean Six Sigma certification knowledge and skills to excel in your current role or secure a promotion
- You're an early- to mid-career professional who has one to three years of experience in any field who'd like to enter the continuous improvement sector

What will you learn while taking the Lean Six Sigma Green Belt certificate?
You will:
- Gain insights into the history, principles, and benefits of Lean and Six Sigma and understanding your role in enhancing organizational performance
- Learn the step-by-step approach to problem-solving and process improvement, applying Define, Measure, Analysis and Control (DMAIC) tools and techniques to real-world scenarios
- Explore techniques for visualizing processes, identifying inefficiencies, and analyzing data to pinpoint root causes of problems
- Develop a working knowledge of statistical analysis tools such as hypothesis testing, regression analysis, and design of experiments to make data-driven decisions and validate process improvements
- Explore Lean principles, including value-stream mapping, to streamline processes and eliminate waste
- Learn project management techniques essential for leading Lean Six Sigma initiatives

LEAN SIX SIGMA GREEN BELT

Certificate Requirements

- 4 required courses

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

Admission Criteria

- An undergraduate degree from an accredited post-secondary institution or a combination of equivalent education, professional designation/certification and professional experience

Note: This certificate is not post-graduation work permit (PGWP) eligible.

Required Courses

- ❑ CYPG 630   Foundations of Six Sigma
- ❑ CYPG 631   Advanced Six Sigma
- ❑ CYPG 632   Lean Thinking
- ❑ CYPG 633   Lean Six Sigma in Action

LEVEL 1 PUBLIC ADMINISTRATION & GOVERNANCE

Includes online and in-person courses.

Delivery	Hybrid
Courses	8
Length	1 to 1.5 years
Cost	$4,800–$5,100

BECOME A PUBLIC-SECTOR LEADER WITH A LEVEL 1 PUBLIC ADMINISTRATION AND GOVERNANCE CERTIFICATE

Are you passionate about the public sector? There are so many different invigorating career opportunities in this field, from community-based organizations, interest groups, and non-governmental organizations to policy units and non-profit sector organizations. You can even work for private-sector companies that collaborate frequently with government agencies.

If you're looking for training that will set you up for success in this ever-growing sector, then The Chang School Certificate in Level 1 Public Administration and Governance is the right fit for you.This public administration certificate offers flexible learning opportunities, and all the courses are applicable to multiple career paths. You'll gain both practical skills and theoretical knowledge from instructors with many years of experience working in senior positions within the public service. You can set up a strong foundation in public policy and administration to help you advance your career goals, no matter which public-sector field calls to you most. Already working in public service and want to give your career a boost? Our public administration courses will give you the tools you need to secure that promotion or level up specific skills.

Our public administration online courses are easy to manage with your schedule, and this certificate in public administration can be completed online in as little as one year. You can also start to build your professional network of present and future public-sector employees while you're still in school, thanks to the many hands-on learning opportunities you get with both fellow learners and instructors active in the field.

The public sector needs more skilled, savvy professionals. Are you ready to start your training to become one of them?

Who should take this Level 1 Public Administration and Governance certificate?
· You're working in the public sector and want to advance your career
· You're a new graduate who's interested in a career in the public service

What will you learn while taking the Level 1 Public Administration and Governance certificate?
You'll learn how to:
· Understand the organizations and operations of the public sector
· Employ analytic, administrative, communication, and management skills to advance your career in the public sector
· Engage in policy-making and policy analysis in the public sector
· Recognize the political forces that shape public administration and policy

Certificate Requirements

- 3 core required courses
- 2 courses from elective core courses
- 1 lower-level liberal studies elective from Table A
- 2 open elective courses
- Cumulative grade point average (GPA) of 1.67+

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

Admission Criteria

Required
- Ontario Secondary School Diploma (OSSD) or equivalent
- With 6 Grade 12 U or M credits including English (ENG4U/EAE4U are the preferred English courses)
- With a minimum grade of 70 percent (subject to competition – candidates may be required to present averages/grades above the minimum)

OR
- Mature student status

Note: If you wish to obtain your Level 1 Certificate in Public Administration and Governance, you must apply through the Office of Undergraduate Admissions for admission to the Public Administration and Governance BA (Honours) program. Do not use the standard continuing education certificate application. Upon completing this certificate and the Level 2 Certificate in Public Administration and Governance, you may continue your studies to earn a BA (Honours) in Public Administration and Governance from Toronto Metropolitan University.

Applicants are admitted to the Level 1 Certificate in Public Administration and Governance in the fall, winter, and spring/summer semesters.

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Financial Support

Awards and Bursaries
The Chang School offers both merit-based awards and need-based financial aid.

Ontario Student Assistance Program (OSAP)
This certificate program is OSAP-eligible. To learn more, visit the Student Financial Assistance website.

Questions?
Contact Client Services ce@torontomu.ca

Core Required Courses

- ❑ CPPA 101   Cdn Public Administration I: Institutions
- ❑ CPPA 102   Cdn Public Administration II: Processes
- ❑ CPPA 125   Rights, Equity and the State

Elective Core Courses (select 2)

- ❑ CPPA 120   Canadian Politics and Government
- ❑ CPPA 121   Ontario Politics and Government
- ❑ CPPA 122   Local Politics and Government
- ❑ CPPA 124   Indigenous Politics and Governance

Lower Liberal Studies Elective - Table A (select 1)

Liberal Studies courses are indicated by "LL' for Lower Level and "UL' for Upper Level. Consult the Undergraduate Calendar for the complete list of Liberal Studies courses. Once you have chosen your course, return to The Chang School website to search for its availability.

- ❑ CGEN LLS   One one-term Lower Level Liberal Studies Elective
- ❑ from Table A

Open Electives (select 2 courses)

Consult the Undergraduate Calendar, for a complete list of appropriate courses. Once you have chosen your course, return to The Chang School website to search for its availability.

- ❑ CGEN PRE   Two Open Electives

LEVEL 2 PUBLIC ADMINISTRATION & GOVERNANCE

Includes online and in-person courses.

Delivery	Hybrid
Courses	8
Length	1 to 1.5 years
Cost	$4,800–$5,100

LEVEL UP YOUR PUBLIC-SECTOR LEADERSHIP SKILLS WITH A LEVEL 2 PUBLIC ADMINISTRATION AND GOVERNANCE CERTIFICATE

Is it time to take your career in the public service to the next level? Complete the Certificate in Level 2 Public Administration and Governance at The Chang School to help you move up in the public sector.

This public administration certificate provides advanced knowledge that can help propel your public-sector career forward. If you want a certificate that will give you both highly tailored practical skills and theoretical knowledge, you've come to the right place. Our public administration courses cover subject matter like Canadian politics and government, Indigenous politics and governance, public budget policy, and the politics of work and labour. We also provide training in economics to help you master the intricacies of public-sector finance – and give you another covetable skill set for your resumé.Our public administration courses are taught by public-service practitioners with tons of experience in the public sector, so they can share their wealth of real-world public policy and administration experience with you, and prepare you for what life on the job will really be like. Collaborating with them and your fellow learners will also help you start or continue building your professional network, even before you finish your certificate and enter the job market.

You can complete this public administration certificate in as little as one year, and schedule your online and in-person classes to work with your existing schedule. Once you graduate, you'll be able to pursue promotions and leadership roles in community-based organizations, international government organizations, interest groups, non-governmental organizations, policy units, and non-profit-sector organizations. You can even use this training to branch into the private sector, in roles that liaise with public-sector organizations.

There is endless opportunity in the public sector: are you ready to pursue it?

Who should take this Level 2 Public Administration and Governance certificate?
- You're working in the public sector and want to advance your career
- You're a new graduate who's interested in a career in the public service

What will you learn while taking the Level 2 Public Administration and Governance certificate?
You'll learn how to:
- Analyze the framework of public policy
- Explore the relationship between government and labour, the ideological basis for administrative institutions, and financial management
- Utilize your newly developed administrative and communication skills

Meet Our Learners

Earning this certificate has deepened my understanding of fire service management, providing me with a comprehensive knowledge base crucial to my aspirations of reaching the executive officer level within the fire service. This achievement has also expanded my skill set, enhancing my critical thinking and problem-solving capabilities.
— Charles McGregor

Certificate Requirements

- 1 from core required courses
- 3 courses from elective core courses (not previously taken in the Certificate in Level 1 Public Administration and Governance)
- 1 lower-level liberal studies elective from Table A
- 1 core electives Economics course
- 2 open elective courses
- Cumulative grade point average (GPA) of 1.67+

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

Admission Criteria

Required:
Level 1 Certificate in Public Administration and Governance

Note: If you wish to obtain your Level 1 Certificate in Public Administration and Governance or the Level 2 Certificate in Public Administration and Governance, you must apply through the Office of Undergraduate Admissions for admission to the Public Administration and Governance BA (Honours) program. Do not use the standard continuing education certificate application. Upon completing this certificate and the Level 1 Certificate in Public Administration and Governance, you may continue your studies to earn a BA (Honours) in Public Administration and Governance from Toronto Metropolitan University.

Financial Support

Awards and Bursaries
The Chang School offers both merit-based awards and need-based financial aid.

Ontario Student Assistance Program (OSAP)
This certificate program is OSAP-eligible. To learn more, visit the Student Financial Assistance website.

Questions?
Contact Client Services ce@torontomu.ca

Core Required Courses

- ❑ CPPA 211   Public Policy

Elective Core Courses (select 3)

Choose 3 courses not previously taken in the Certificate in Level 1 Public Administration and Governance.

- ❑ CPPA 120   Canadian Politics and Government
- ❑ CPPA 121   Ontario Politics and Government
- ❑ CPPA 122   Local Politics and Government
- ❑ CPPA 124   Indigenous Politics and Governance
- ❑ CPPA 235   Theories of the State
- ❑ CPPA 303   Public Budget Policy/Politics
- ❑ CPPA 319   Politics of Work and Labour

Lower Liberal Studies Elective - Table A (select 1)

Liberal Studies courses are indicated by "LL' for Lower Level and "UL' for Upper Level. Consult the Undergraduate Calendar for the complete list of Liberal Studies courses. Once you have chosen your course, return to The Chang School website to search for its availability.

- ❑ CGEN LLS   One one-term Lower Level Liberal Studies Elective from Table A

Core Elective Economics Course (select 1)

- ❑ CECN 101   Principles of Microeconomics
- ❑ CECN 104   Introductory Microeconomics
- ❑ CECN 110   The Economy and Society
- ❑ CECN 201   Principles of Macroeconomics
- ❑ CECN 204   Introductory Macroeconomics
- ❑ CECN 210   Understanding Economics
- ❑ CECN 320   Introduction to Financial Economics

Open Electives (select 2 courses)

Consult the Undergraduate Calendar, for a complete list of appropriate courses. Once you have chosen your course, return to The Chang School website to search for its availability.

- ❑ CGEN PRE   Two Open Electives

LIGHTING DESIGN

Includes online and in-person courses.

Delivery	Hybrid
Courses	6
Length	1.5 to 2 years
Cost	$5,200–$5,500

BRIGHTEN UP YOUR JOB PROSPECTS WITH A LIGHTING DESIGN CERTIFICATE

The lighting industry is going through a lot of changes, thanks to legislation that limits energy budgets for new construction and retrofitting. There is an increasing need for buildings that are both environmentally responsible and ergonomically sound. That means that lighting designers with up-to-date training are in high demand to help companies design smart, sustainable lighting. You can find work as a lighting consultant in a wide variety of sectors, from architecture and landscape architecture, business, engineering, and fashion to interior design, theatre design and production, and radio and television arts.The Certificate in Lighting Design from The Chang School is unique in Canada, and the perfect prep for a successful career in lighting design. Our lighting design courses start with the basics and progress by the end of the program to advanced lighting design techniques that you'll be able to practice with supervision from experienced lighting designers. You'll get industry experience, too, thanks to project-based courses guided by professionals in the field. This certificate program is also supported by our partner, the Illuminating Engineer Society (IES), Toronto Section, so if you're registered in the Certificate in Lighting Design, you can also apply for an IES Award.

Our certificate can be completed online, so you can do your coursework on a schedule that works for you. Plus, you can finish the program in as little as 18 months, then start your career journey in lighting.

Are you ready to take that first step? We're excited to brighten up your career path with a Certificate in Lighting Design.

Who should take this Lighting Design certificate?
- You want to enhance your knowledge and skills in the art and science of lighting design to pursue a lighting design career
- You work in architecture, electrical engineering, event planning, facility management, or energy efficiency and want to upskill for a potential promotion or new career move
- You're a lighting technician or electrician and want to stay up-to-date on industry trends
- You're studying design, architecture, or related fields, or have a keen interest in lighting design, and want to develop a more specialized lighting-design skill set

What will you learn while taking the Lighting Design certificate?

You'll learn how to:
- Light sources and understand how they relate to the lighting design process
- Produce photometric calculations to analyze design applications
- Master energy-efficiency and management techniques
- Understand architectural daylight approaches
- Balance the social and environmental aspects of lighting design

LIGHTING DESIGN

Certificate Requirements

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

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

Admission Criteria

Recommended:
- An undergraduate degree

OR
- Mature student status with related professional experience and education

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Financial Support

The Chang School offers both merit-based awards and need-based financial aid. This certificate is not eligible for the Ontario Student Assistance Program (OSAP).

Questions?
Contact Client Services ce@torontomu.ca

Required Courses

- ❑ CDID 500   Fundamentals in Lighting
- ❑ CDID 505   Lighting Photometric Software
- ❑ CDID 520   Lighting Controls & Energy Management
- ❑ CDID 540   Daylighting Design & Techniques
- ❑ CDID 560   Intermediate Lighting Design

Electives (select 1)

- ❑ CDID 552   Entertainment Lighting Design
- ❑ CDID 553   Lighting Design Practicum

LOCAL ECONOMIC DEVELOPMENT

Certificate can be completed online.

Deliver	Online
Courses	4
Length	1 year
Cost	$3,000–$3,800

CREATE STRONGER COMMUNITIES WITH A LOCAL ECONOMIC DEVELOPMENT CERTIFICATE

A lot of strategic planning goes into a community for the local economy to thrive. Our communities need trained professionals to help them become as sustainable as possible for many years to come. The Chang School Certificate in Local Economic Development will give you the business administration, public administration, development, project management, airport development, real estate, and marketing skills you need to become an in-demand local economic development professional in the field.

Our Local Economic Development certificate includes four economic development courses and can be completed online, allowing you to accelerate your local economic development career quickly. Our instructors are all highly experienced professionals in the field who use an advanced experiential learning approach and recent case studies to help you learn about the real-world municipality issues you'll face in this industry – and how to tackle them successfully. We're also proud to offer a capstone course that allows you to work closely with your instructor to choose a municipal issue you're passionate about and research and present your solutions to the municipality itself. As a graduate of this certificate, you may apply your courses towards the educational requirements of the Certified Economic Developer (EcD) certification. Ec.D. is Canada's nationally recognized designation for economic developers, and Ec.D. holders are highly sought after in the field of LED. Each course represents 5 points towards your Ec.D. designation.

Communities need more passionate advocates like you. Jumpstart your local economic development career and enjoy the job satisfaction of working to improve community well-being, every day.

Meet Our Learners

This certificate has truly been a life-changing experience for me. It not only provided the knowledge and tools necessary to excel in my career but also fostered a supportive and empowering environment that helped me achieve my dream of running my own economic development firm. I am immensely grateful for this incredible educational journey.
— Alia Abbas

Who should take this Local Economic Development certificate?
- You're a business improvement area (BIA) manager who works in collaboration with municipalities
- You're an economic development professional in the public or private sector
- You want to strengthen your existing local economic development career or pivot into a local economic development career
- You work in government, real estate, community agencies, or a municipality and would like to improve your education, skills, and career opportunities

What will you learn while taking the Local Economic Development certificate?
You'll learn how to:
- Apply in-depth knowledge of the economic development process
- Navigate governance as it relates to the LED structure
- Conduct tactical and strategic municipal planning and build strategies
- Utilize solid communication skills to deliver presentations, media relations, and communications planning
- Create and present marketing and advertising plans
- Interpret financial statements and budgets, analyze risks, and create business plans

Certificate Requirements

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

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

Admission Criteria

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

OR
- An undergraduate degree

OR
- A college diploma

OR
- Mature student status with combination of relevant work and life experience

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Required Courses

- ❑ CPLE 795   Local Economic Development Fundamentals
- ❑ CPLE 995   Ecn Development and Business Improvement
- ❑ CVUP 155   LED Applied Research Project
- ❑ CVUP 160   Capstone Project in LED

MENTAL HEALTH & ADDICTIONS

Certificate can be completed online.

Deliver	Online
Courses	10
Length	1 to 2 years
Cost	$5,700–$5,800

SUPPORT IMPROVED WELLBEING WITH A MENTAL HEALTH AND ADDICTIONS CERTIFICATE

As more and more people seek treatment for mental health and addiction issues, the need for skilled, compassionate addictions and mental health professionals skyrockets. The Chang School offers a well-rounded Certificate in Mental Health and Addictions that provides you with a strong foundational knowledge in general psychology to help both in your future mental-health and addictions courses and career.

The certificate will teach you assessment, treatment, and self-help strategies within individual, group, family, and community contexts, and there's the opportunity to participate in psychological research as well.You can then choose from a wide variety of electives like child development, human brain circuitry, and developmental psychopathology to tailor our addictions and mental health program to your interests and deepen your knowledge. Other electives include coursework around law, health, and healthcare, immigration, and human sexuality. And if you're intrigued about exploring the ever-growing death doula career path, our mental health and addictions program has a Death, Dying and Bereavement elective, too.

Currently working full-time? Our online certificate allows you to complete your studies at your own pace. You can even obtain your Certificate in Mental Health and Addictions in just one year.

There's no better time to start than now: our community needs more educated mental health and addictions professionals, and you could be one of them.

Who should take this Mental Health and Addictions certificate?
- You're ready to pivot to a new career path in mental health and addictions and need to master the basics
- You're already working in the mental healthcare or addictions space and want to further specialize in a specific mental health or addictions discipline to advance your career in a different direction
- You want to boost your mental health and addictions knowledge to enrich your work and better understand the lived experience of clients, employees, and colleagues
- You're a student who'd like to use the degree-credit courses towards completion of your undergraduate degree or strengthen an application for graduate school
- You have an undergraduate degree and want to enhance your education with additional specialization in mental health and additions

What will you learn while taking the Mental Health and Addictions certificate?
You'll learn how to:
- Apply the basic principles of psychology to everyday experience
- Utilize the psychology of addictions and disorders to help clients
- Provide support to people experiencing depressive disorders, anxiety disorders, schizophrenia, personality disorders, and eating disorders
- Find, read, understand, and apply empirical research in an applied setting

Certificate Requirements

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

**Select 2 (or 3) selections from Electives – Group A and 3 (or 4) courses from Electives – Group B.

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

Admission Criteria

Recommended:
- Ontario Secondary School Diploma (OSSD) or equivalent
  - With 6 Grade 12 U or M credits
OR
- Mature-student status with 3 years of professional experience in business, community service, or industry

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Financial Support

Awards and Bursaries
The Chang School offers both merit-based awards and need-based financial aid.

Ontario Student Assistance Program (OSAP)
This certificate program is OSAP-eligible. To learn more, visit the Student Financial Assistance website.

Questions?
Contact Client Services ce@torontomu.ca

Required Courses

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

Electives – Group A (select 2 or 3)

You may only select 1 of CPSY 214 or CPSY 607. If you choose to take 2 courses from this category, you will need to complete 4 courses from Electives – Group B to fulfill the certificate requirements; if you take 3 courses, you will need to complete 3 courses from Electives – Group B.

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

Electives – Group B (select 3 or 4)

- CPSY 300   Psychology and Law
- CPSY 302   Child Development
- CPSY 412   Human Brain Circuitry
- CPSY 602   Developmental Psychopathology
- CPSY 605   Psychology of Health and Health Care
- CPSY 620   Psychology of Immigration
- CPSY 621   Psychology of Human Sexuality
- CPSY 682   Sleep
- CPSY 802   Death, Dying and Bereavement
- CPSY 805   Adjustment, Stress and Coping
- CPSY 806   Behaviour Modification
- CPSY 808   Community Psychology

MUSIC: GLOBAL & CULTURAL CONTEXTS

Certificate can be completed online.

Deliver	Online
Courses	6
Length	1 to 2 years
Cost	$3,400–$3,600

HIT THE RIGHT NOTE FOR YOUR CAREER WITH A MUSIC: GLOBAL AND CULTURAL CONTEXTS CERTIFICATE

It's time to make beautiful music in your career. Music professionals are in demand in many areas, including arts and cultural organizations; early childhood music education; fundraising, outreach, and event planning; not-for-profits; psychology and anthropology; and disability organizations. The Chang School offers a Certificate in Music: Global and Cultural Contexts that will give you the music education you need to make your career hit just the right note.

This music certificate will teach you about all kinds of music from around the globe, from ancient times to the modern era, but you'll also hone your critical thinking, analysis, and writing skills. If you're planning on starting your own music business, this certificate can help give you the skills and knowledge you need to stand out from other companies in a competitive music industry.Not looking to turn pro? This music certificate program is also highly enjoyable for people who just love music and want to learn more about it for personal enrichment. Plus, our flexible online courses fit right into your busy schedule.

There's a wide variety of courses to choose from, covering subjects like cultural music, world and early European music, music cultures of the city, women in popular music, the history of pop music, and music and film. We also offer training in social issues in pop music.

Let's make that career really sing. Start your Certificate in Music: Global and Cultural Contexts now.PageWho should take this Music: Global and Cultural Contexts certificate?
- You're a recent university graduate who wants to start or boost a career in music
- You're looking to enhance your life through the study of music and understand music in its cultural context

What will you learn while taking the Music: Global and Cultural Contexts certificate?
You'll learn how to:
- Survey specific music cultures from around the world, popular music genres and artists, and Western European music
- Employ a musical vocabulary and aural skills
- Conduct theoretical analyses of musical compositions
- Utilize critical thinking, oral and written communication, and research skills
- Articulate the relationship between music and pop culture
- Critique social and political structures through the lens of popular music
- Understand how cultures are reflected in their music

MUSIC: GLOBAL & CULTURAL CONTEXTS

Certificate Requirements

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

**You can select either CMUS 101 or CMUS 106 as your required course, or take both. If you choose to take both, you only need to complete four electives to fulfill the certificate requirements.

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

Admission Criteria

Recommended:
- Ontario Secondary School Diploma (OSSD) or equivalent
  - With 6 Grade 12 U or M credits, including English
  - With a minimum average of 70 percent
OR
- Mature student status with relevant work experience

Financial Support

Awards and Bursaries
The Chang School offers both merit-based awards and need-based financial aid.

Ontario Student Assistance Program (OSAP)
This certificate program is OSAP-eligible. To learn more, visit the Student Financial Assistance website.

Questions?
Contact Client Services ce@torontomu.ca

Required Courses

You can select either CMUS 101 or CMUS 106 as your required course, or take both. If you choose to take both, you only need to complete 4 electives to fulfill the certificate requirements.

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

Electives

- ❑ CMUS 201   Introduction to Classical Music
- ❑ CMUS 211   Music Cultures of the City
- ❑ CMUS 220   Global Popular Music
- ❑ CMUS 501   Music of World Cultures
- ❑ CMUS 520   Women in Popular Music
- ❑ CMUS 503   Social Issues in Popular Music
- ❑ CMUS 505   The History of Pop Music
- ❑ CRTA 180   Music and Film

NEWS STUDIES

The Certificate in News Studies will not be accepting any new registrants. This certificate has been discontinued effective Fall 2021, and the courses related to this certificate will no longer be offered.

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

Explore Our Related Certificates
Take this opportunity to pursue a new direction! If you'd like to continue learning with us, we have other related certificates and courses available for you to discover. Check out these options:
- Deliver effective, persuasive information and keep your organization in the know through our Certificate in Business Communication
- Become a crisis management pro and business reputation defender with our Certificate in Public Relations

Required Course
- ❑ CNNS 101   Introduction to News Studies

Electives (select 5)
- ❑ CNNS 102   Understanding Multimedia Journalism
- ❑ CNNS 344   Law, Ethics and Evolving News Standards
- ❑ CNNS 401   History of Journalism
- ❑ CNNS 404   Journalism's Best
- ❑ CNNS 410   Queer Media
- ❑ CNNS 412   Documentary Survey
- ❑ CNNS 419   Journalism in Comedy
- ❑ CNNS 500   Journalism and the Arts
- ❑ CNNS 502   Follow the Money: Business Journalism
- ❑ CNNS 505   Health and Science Journalism
- ❑ CNNS 512   Reporting Sports

NONPROFIT & VOLUNTARY SECTOR MANAGEMENT

Certificate can be completed online.

Deliver	Online
Courses	8
Length	8 months to 2 years
Cost	$4,700–$4,800

MAKE A DIFFERENCE WITH A NONPROFIT AND VOLUNTARY SECTOR MANAGEMENT CERTIFICATE

Working in the nonprofit and voluntary field is a great way to create positive change in your world and beyond. The Chang School is proud to offer a Certificate in Nonprofit and Voluntary Sector Management that's well-respected in the industry and will give you the skills you need to launch a truly meaningful career in this ever-evolving field.

One of the few of its kind in Canada, this program provides a wide-ranging education to all kinds of learners, whether you're just starting out in the sector, want to transition in from another career, or are already a seasoned nonprofit professional looking to boost your skills in nonprofit management. Our learners come from many different backgrounds and have diverse experience and networks, so you can forge long-term connections within the sector during your studies. Our expert instructors – all highly experienced nonprofit managers and professionals working at nonprofits – have created coursework based on current approaches, theories, and research that prioritizes leadership skills and diversity. We offer real-world case studies, hands-on assignments, and guest speakers who are doing exciting work in the field. You'll explore critical issues in the sector, and learn how effective nonprofits operate.

You can customize your learning with electives, and also get to do a capstone research project aligned with your interests where you can flex your new presentation skills.

You can complete your nonprofit management certificate in as little as eight months.

The world needs more people to help make it better – start your career in Nonprofit and Voluntary Sector Management today.

Meet Our Learners

This certificate helped me get a more solid grounding in the wider non-profit world as I moved into a senior management role within my organization. I still go back to the learnings, texts, and papers I was introduced to in the certificate as I do my work in the industry, and anticipate doing so for many years to come.
— Simon Chambers

Who should take this Nonprofit and Voluntary Sector Management certificate?
- You're an experienced nonprofit professional who's ready to take on a leadership role and manage a diverse team
- You're an experienced worker who wants to learn specific skills from a nonprofit perspective
- You're interested in transitioning into the nonprofit sector from the business or public sector
- You're an undergraduate student who wants to complete degree-credit courses or minor in the nonprofit sector
- You work in the public, institutional, or private sector and have a goal to develop relationships and partnerships with nonprofit organizations

What will you learn while taking the Nonprofit and Voluntary Sector Management certificate?
You'll learn about:
- Management strategies and skills
  - Leadership
  - Governance
  - Equity
  - Change management
  - Strategy
  - Relationship-building with government, business, civil society, and within the sector
- Applied management competencies
  - Marketing
  - Financial management
  - Diversity
  - Evaluation
  - Advocacy
  - International NGOs
- Emerging ideas and perspectives
  - Learn about innovative nonprofit and management practices in Canada and other countries
  - Critically reflect on key issues and opportunities in the sector and how they influence the development and shape of the sector
  - Understand key elements of nonprofit effectiveness and efficiency and how management approaches and practices can enhance results and impact
  - Gain experience with strategies, tools, and approaches that can be applied to your nonprofit
  - Connect with and consider the new and diverse perspectives and experiences of other Certificate learners

NONPROFIT & VOLUNTARY SECTOR MANAGEMENT

Certificate Requirements

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

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

Admission Criteria

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

OR
- Mature student status

Required Courses

You may only select one of CINP 902 or CINP 915.

- ❑ CINP 900   Understanding the Nonprofit Sector
- ❑ CINP 901   Effective Nonprofit Organizations
- ❑ CINP 902   Evaluation for Nonprofits
- ❑ CINP 915   Financial Management for Nonprofits
- ❑ CINP 920   Critical Issues in the Nonprofit Sector

Electives (select 4 not previously taken in Required Courses)

- ❑ CINP 902   Evaluation for Nonprofits
- ❑ CINP 910   Strategic Planning for Nonprofits
- ❑ CINP 911   Advocacy and Gov't Relations: Nonprofits
- ❑ CINP 912   Marketing for Nonprofits
- ❑ CINP 913   Leadership in Nonprofits
- ❑ CINP 914   Diversity in Nonprofits
- ❑ CINP 915   Financial Management for Nonprofits
- ❑ CINP 916   Nonprofits on the Global Stage

OCCUPATIONAL HEALTH & SAFETY

Certificate can be completed online.

Delivery Online
Courses 8
Length 2 years
Cost $4,800–$4,900

CREATE SAFER WORKPLACES WITH AN OCCUPATIONAL HEALTH AND SAFETY CERTIFICATE

Want to help workers maintain their wellbeing? This Certificate in Occupational Health and Safety is just what you need to secure a role in the booming occupational health and safety industry.

The Chang School has recruited top occupational health and safety specialists to create and teach our courses so you can get cutting-edge training in everything you need to excel in an occupational health and safety job. Occupational health and safety professionals with health and safety certification are in high demand across many industries; everyone needs safe and healthy workplaces. After completing our health and safety certificate program, you might land a job in a hospital, a steel mill, a university, an airport, local government, or any other place that values workers' health and safety.This occupational health and safety certificate program is online, so you can do all your occupational health and safety certificate courses at your own pace. It will give you foundational knowledge and help you become an expert in evaluating and managing workplace hazards as well as developing and implementing health and safety programs. You'll also master the basics of reporting, organizational behaviour, occupational health and safety law, hazard recognition and control, and more.

Electives allow you to hone your skills further, whether it's coursework in health promotion and community development or Canadian public administration. Looking to take the Canadian Registered Safety Professional (CRSP) exam? This certificate will help get you started on the path to health and safety certification.

Our workplaces need more passionate advocates for health and safety. We're ready to help you get out there and into this in-demand field.

Note: After completing this certificate, you must complete the other two certificates – the Certificate in Advanced Safety Management and the Certificate in Occupational Health and Safety Leadership – to meet the educational requirements to write the CRSP exam.

Want to learn more about other occupational health and safety programs at The Chang School? Check out our Occupational Health and Safety certificate series.

Who should take this Occupational Health and Safety certificate?
- You're looking for a new job or in-demand skills
- You need to fulfill an occupational health and safety function as part of your current role
- You're an occupational health and safety professional who wants to work toward meeting the CRSP educational requirements

What will you learn while taking the Occupational Health and Safety certificate?
You'll learn how to:
- Navigate occupational health and safety legislation
- Master the occupational health and safety management system basics
- Write occupational health and safety summary reports
- Recognize workplace hazards and assess their risk
- Perform exposure assessments
- Provide solutions for controlling hazards

Certificate Requirements

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

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

Admission Criteria

Required:
- Ontario Secondary School Diploma (OSSD) or equivalent
  - With 6 Grade 12 U or M credits
OR
- Mature student status

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Financial Support

Awards and Bursaries
The Chang School offers both merit-based awards and need-based financial aid.

Ontario Student Assistance Program (OSAP)
This certificate program is OSAP-eligible. To learn more, visit the Student Financial Assistance website.

Questions?
Contact Client Services ce@torontomu.ca

Required Courses

- ❑ CCMN 114   Short Management Reports
- ❑ CINT 905   Conflict Resolution in Community Services
- ❑ COHS 208   Occupational Health and Safety Law
- ❑ COHS 314   Physical Agents
- ❑ COHS 508   Occupational Health and Safety
- ❑ COHS 608   Hazard Recognition and Control
- ❑ COHS 811   OHSE Management Systems

Electives (select 1)

- ❑ CINT 904   Health Promotion and Community Development
- ❑ CPPA 101   Cdn Public Administration I: Institutions

OCCUPATIONAL HEALTH & SAFETY LEADERSHIP

Certificate can be completed online.

Delivery	Online
Courses	4
Length	1 year
Cost	$2,600–$3,400

BECOME AN INDUSTRY LEADER WITH AN OCCUPATIONAL HEALTH AND SAFETY LEADERSHIP CERTIFICATE

The Chang School Certificate in Occupational Health and Safety Leadership will give you the health and safety background you need to rise to the top of your industry and help make real change for workplaces in Canada and possibly beyond.

These health and safety courses are designed to help mid-career occupational health and safety (OHS) professionals move up into leadership roles. By completing the Certificate in Occupational Health and Safety and the Certificate in Advanced Safety Management, along with this occupational health and safety program, you'll meet the educational requirements to write the Board of Canadian Registered Safety Professionals (BCRSP) exam to become a Canadian Registered Safety Professional (CRSP). This certificate program meets the educational requirements for CRSP certification. According to the BCRSP, becoming a CRSP can help you increase your earning potential, and enhance your employability, mobility, and professional credibility.Our instructors are industry experts who can help you learn how to lead, and lead well. The health and safety courses in this certificate cover subjects like safety leadership and ethics and leadership framework for community, along with must-have skills like disability management and project management fundamentals.

This occupational health and safety certificate is online so you can learn at your own pace, and balance your current work responsibilities and education.

Let's take the next step in your OHS career together, today.

Want to learn more about other occupational health and safety programs at The Chang School? Check out our Occupational Health and Safety certificate series.

Who should take this Occupational Health and Safety Leadership certificate?
- You've completed the Certificate in Occupational Health and Safety and/or the Certificate in Advanced Safety Management and want to take your OHS career to the next level
- You want to work as a leader in the OHS field
- You work in an OHS leadership position and want to formalize your education and build on your skills

What will you learn while taking the Occupational Health and Safety Leadership certificate?
You'll learn how to:
- Lead best practice in OHS planning and management
- Understand disability management and the compensation claims process
- Implement fundamentals of project management
- Apply OHS business perspectives
- Understand ethical leadership
- Interpret OHS return on investment, cost, and savings

Certificate Requirements

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

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

Admission Criteria

Recommended:
- Certificate in Occupational Health and Safety or equivalent

OR
- Mature student status and at least three years of professional experience in occupational health and safety.

If you wish to apply to register for the Certificate in Advanced Safety Management, contact the Program Coordinator, Rose Reid at rosereid@torontomu.ca.

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Financial Support

Awards and Bursaries
The Chang School offers both merit-based awards and need-based financial aid.

Ontario Student Assistance Program (OSAP)
This certificate program is OSAP-eligible. To learn more, visit the Student Financial Assistance website.

Questions?
Contact Client Services ce@torontomu.ca

Required Courses

- ❑ COHS 477   Disability Management
- ❑ COHS 840   OHS Leadership and Ethics
- ❑ CTEC 210   Fundamentals of Project Management
- ❑ CINT 960   Leadership Framework for Community

PEOPLE ANALYTICS FOR HR PROFESSIONALS

Certificate can be completed online.

Delivery	Online
Courses	4
Length	8 months to 1.5 years
Cost	$2,800-$2,900

LEVEL UP YOUR HR SKILLS WITH A PEOPLE ANALYTICS FOR HR PROFESSIONALS CERTIFICATE

If you want to take your HR career to the next level, The Chang School's new Postgraduate Certificate in People Analytics for HR Professionals can help you land that HR leadership promotion you've been working towards.

This people analytics certificate program was designed to hone the HR data analytics and HR leadership skills you'll need to excel in the next phase of your career. There are many HR leadership opportunities available in this fast-growing market, whether it's in banking and insurance, consulting firms, utilities, telecommunications, or retail.

You'll develop a deep understanding of the intersection between HR practices and HR analytics, and master data-driven decision-making. You'll also learn how to collect, analyze, and interpret data around employee behaviour, engagement, performance, and talent management.The HR analytics courses prioritize interactive, practical learning experiences and industry expert guest speakers that will help you tackle real-world HR issues in your current workplace and in future opportunities. Our instructors are all keen to share their career journey and insights to help you evolve your existing HR career, and collaborating with your fellow HR peers can help you expand your current professional network even further.

You'll emerge from this program as a strategic HR professional, well-versed in using data and workforce analytics to drive organizational effectiveness and shape the future of work. Stand out amongst the competition and start your people analytics certificate today.

Who should take this People Analytics for HR Professionals certificate?
- You're an HR leader, HR manager, HR analyst, or HR specialist who wants to enhance your analytical skill set and optimize HR processes and programming
- You're an early-career professional who wants to enter HR with a focus on data-informed programming and decision making
- You're a data analytics professional who'd like to transition into HR practice or understand HR business goals and needs in order to work more effectively with HR functions

What will you learn while taking the People Analytics for HR Professionals certificate?
You'll learn how to:
- Demonstrate your ability to effectively tailor communications and presentations to various audiences using data visualization techniques
- Identify, collect, store, clean, analyze and interpret data with an awareness of legal and ethical practices
- Apply statistical techniques to analyze employee data, identify patterns, correlations, and trends, and use statistical models for predictive analytics and forecasting
- Describe the strategic importance of people analytics in driving organizational success and aligning HR practices with business objectives

PEOPLE ANALYTICS FOR HR PROFESSIONALS

Certificate Requirements

- 4 required courses

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

Admission Criteria

Required:
- Undergraduate degree or equivalent from an accredited post-secondary institution

Recommended:
- At least 3 years of relevant professional experience

Note: This certificate is not post-graduation work permit (PGWP) eligible

Required Courses

- ❏ CYPG 601   Foundations of People Analytics
- ❏ CYPG 602   Data Management and Visualization
- ❏ CYPG 603   Foundations of Statistical Analysis
- ❏ CYPG 604   Strategic Application of People Analytics

PHOTOGRAPHY STUDIES

Includes online and in-person courses.

Delivery	Hybrid
Courses	5
Length	1.5 to 2.5 years
Cost	$4,000–$4,500

LEARN TO BECOME A BETTER PHOTOGRAPHER WITH A PHOTOGRAPHY STUDIES CERTIFICATE

Photographers are in-demand in so many industries. Sales and advertising. Government. Education. Media. The arts. With a Certificate in Photography Studies from The Chang School, you'll be ready to take advantage of these opportunities and share your craft with the world.

Our photography certificate gives you experience in different genres of photography, helps you experiment with practical and creative approaches, and teaches you the key elements in contemporary photography. These photography and videography courses will teach you how to use a digital camera, image-making software and workflows, and digital printing.Interested in specializing in a certain kind of photography? This photography program will give you the technical foundation to start your own business in photography for commercial products, contemporary photographic art, fashion, human figure, photojournalism, portraits, and weddings.

If you're already working in the creative photography industry, you can enhance your technical proficiency so you can emerge with the skills to really thrive as a fine art or commercial photographer.

The experienced instructors in our Photography Studies certificate are all working photographers. They can help you learn how to build your personal networks and professional portfolio.

You can complete much of this photography program online, and schedule coursework around any other responsibilities you may have.

The world always needs more striking imagery: are you ready to make some?

Meet Our Learners

The program filled in some technical gaps and gave me the confidence and skill to start my own business.The instructors were top-notch, each class more interesting than the last, and I came away with a strong start in the industry. I still consider my instructors mentors today and wouldn't trade that connection and experience for anything.
— Erica Cheah

Who should take this Photography Studies certificate?
- You're an amateur or professional photographer looking to build your technical and theoretical skill sets, improve your employability, and upgrade your current level of photography expertise
  - You're looking to retrain or make a career change into photography
- You want to advance your professional and personal photography goals

What will you learn while taking the Photography Studies certificate?
You'll learn how to:
- Understand the technical side of photography, including:
  - lighting techniques
  - image capture and composition
  - image manipulation via Photoshop and Lightroom
  - bookmaking
- Master photography-business skills
- Perform photography production
- Create a number of portfolios to change or advance your career
- Explore specialties including portrait, wedding, editorial, documentary, fashion and more

Note: Effective July 1, 2024, the curriculum for the certificate in Photography Studies has been updated.

Learners who registered for the certificate prior to July 1, 2024, are to follow the curriculum that was in place for their year of registration. Please refer to the archived calendar for details. If you're interested in the new curriculum and would like to explore your options, contact our Client Services team at ce@torontomu.ca for more information on making the switch.

Certificate Requirements

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

You must complete the certificate within 4 years of registering in the Certificate in Photography Studies program.

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

Admission Criteria

Recommended:
- Ontario Secondary School Diploma (OSSD) or equivalent
  - With 6 Grade 12 U or M credits (including English)
  - With a minimum average of 60 percent
OR
- Mature student status with professional experience

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Financial Support

The Chang School offers both merit-based awards and need-based financial aid. This certificate is not eligible for the Ontario Student Assistance Program (OSAP).

Questions?
Contact Client Services ce@torontomu.ca

Required Course

- ❑ CDFP 450   Digital Photography Fundamentals

Electives: select 4

- ❑ CDFP 328   Photography Production I
- ❑ CDFP 329   Photography Production II
- ❑ CDFP 333   Photography and Digital Imaging
- ❑ CDFP 353   From Still to Motion
- ❑ CDFP 358   Photography and the Screen
- ❑ CDFP 367   Photoshop for Photographers
- ❑ CDFP 403   Creative Wedding Photography
- ❑ CDFP 404   Magazine/Editorial Photography
- ❑ CDFP 455   Visual Narratives: Art Direction for Photographers
- ❑ CDFP 456   Digital Printing
- ❑ CDFP 458   Fashion Photography
- ❑ CDFP 459   Portrait Photography
- ❑ CDFP 460   Documentary Photography
- ❑ CDFP 461   Studio Lighting Essentials at Home: Mastering Lighting in Any Space
- ❑ CDFP 462   Creative Photographic Insights for Modern Practice
- ❑ CDFP 905   Contemporary Photographic Art
- ❑ CFPN 536   Media Business Practices

PRACTICAL DATA SCIENCE & MACHINE LEARNING

Certificate can be completed online.

Delivery	Online
Courses	4
Length	1 to 1.5 years
Cost	$4,100–$4,200

DELVE INTO THE DEPTHS OF DATA SCIENCE WITH A PRACTICAL DATA SCIENCE AND MACHINE LEARNING CERTIFICATE

Are you eager to discover just how powerful data can be? Good news: employers need more professionals like you. The Chang School's Certificate in Practical Data Science and Machine Learning gives you the must-have knowledge and skills you need to begin or boost your data science career.

Our data science courses offer an immersive exploration of data science, machine learning, deep learning, and advanced data mining. This data science training will teach you how to harness the power of neural networks, allowing you to unlock valuable information and uncover hidden relationships in complex datasets. This data science certificate delves into cutting-edge techniques such as deep learning and ensemble models, and advanced concepts in data science and machine learning.We prioritize hands-on learning, and participation in practical activities, projects, and real-world scenarios. We also provide support for learners throughout our data science program from experienced instructors with extensive industry knowledge and practical expertise in data analytics.

Our data scientist certificate is also recognized by an industry-leading association, The Institute for Operations Research and the Management Sciences (INFORMS), and meets the requirements for you to become a Certificated Analytics Professional (CAP®).

You can finish this certificate in as little as three semesters, and complete all your data science courses online. You'll have all the data scientist certification you need to become highly sought after in many exciting industries, from technology and finance to healthcare. Excited to get started? We can't wait to see what you can achieve with data.

Who should take this Practical Data Science and Machine Learning certificate?
- You're a professional with experience in Python, machine learning, and predictive analytics who wants to expand your expertise
- You've already taken our Certificate in Data Analytics, Big Data and Predictive Analytics and want to learn the essential components that are intrinsic to practical data science and machine learning

What will you learn while taking the Practical Data Science and Machine Learning certificate?
You'll learn how to:
- Construct big data analytics algorithms and use machine-learning algorithms to solve real-world problems
- Use the Linux file system effectively, including Bash commands and regular expressions; work with the Hadoop platform; write complex queries on big data using Apache Hive; and write scripts and analyze data using Apache Spark
- Enhance your practical experience in data analytics and machine learning, as well as your knowledge of AI, to progress to senior roles within the data-science domain
- Use relevant and visualization Python libraries to address a problem
- Build and design predictive models to represent domains under study, and build ensemble learning models to aim for higher accuracy
- Differentiate between supervised and unsupervised machine learning algorithms based on research questions
- Apply, train, and evaluate different deep learning models based on specific tasks
- Replicate state-of-the-art studies and highlight the similarities and differences between the actual and replicated work in terms of applied datasets, approaches, tools, and outcomes
  Optimize AI Assisted Coding technologies integrating with various IDEs offering utility with code suggestions, and augment your skills and understanding when it comes to complex coding scenarios, the codebase, or solving coding problems in data queries or within frameworks
- Complete data analytics assignments and final projects that you can include in your portfolio when applying for jobs

You'll also learn how use these tools:
- Programming languages: Python
- Data processing frameworks: Hadoop (MapReduce), Apache Spark, Hive
- Data collection and query tools: XPath, XQuery
- Data visualization tools: Tableau
- Libraries for data analysis: Python Libraries (TensorFlow, PyTorch, Keras), Spark libraries (Spark MLlib, Spark ML)
- Integrated development environments (IDEs): MS-VSCode, PyCharm

What career support is available for you?
During your certificate, we offer extensive career help, including:
- Virtual mentor services
- Alumni networking
- Synchronous weekly online sessions
- Educator support
- Tutoring services
- Career discussion forums

Certificate Requirements

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

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

Admission Criteria

Completion of The Chang School's Data Analytics, Big Data, and Predictive Analytics certificate or equivalent.
OR
Mature student status and other relevant qualifications or relevant industry experience (to be determined by the Program Director).

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Required Courses

- ❑ CIND 719   Big Data Analytics Tools
- ❑ CIND 840   Practical Approaches in Machine Learning
- ❑ CIND 850   Practical Deep Learning
- ❑ CIND 860   Advanced Data Analytics Project

PRIVACY, ACCESS, & INFORMATION MANAGEMENT

Certificate can be completed online.

Delivery	Online
Exam	In person
Length	1 to 2 years
Cost	$4,000–$4,400

PROTECT VALUABLE DATA WITH A PRIVACY, ACCESS, AND INFORMATION MANAGEMENT CERTIFICATE

As privacy breaches become more and more common, we need smart, savvy professionals trained and at the ready to safeguard our privacy and data 24/7. The information management field is fast-growing – and these professionals are very much in demand. The Chang School has just the training you need to succeed in the information management industry. Our Certificate in Privacy, Access, and Information Management will help you master privacy regulations and acquire the practical and operational skills to become a sought-after privacy and data protection pro.During this privacy certificate, you'll learn how to conduct privacy risk assessments, and develop and implement privacy programs. Build your data privacy training in information access and privacy protection, privacy design, and applying privacy access. We want all our learners to receive a well-rounded education, so we offer an exciting variety of electives designed to make you as in-demand in the marketplace as possible. Diverse information management courses in subjects like public relations principles, IT infrastructure, business law, and organizational behaviour will prep you for a wide range of opportunities. Interested in the healthcare sphere? We offer courses in health informatics and health information access and privacy as well.

The privacy certificate can be completed online at your own pace, with in-person exams, and finished in two years or less. Our information management courses are taught by senior privacy professionals, and offer plenty of practical assignments that incorporate real-world issues, including a capstone course where learners can apply privacy and access principles to a project focused on an emerging technology within a particular sector they're interested in.

Ready to get started? Let's start your privacy education, today.

Meet Our Learners

For those with minimal privacy experience, this program provides the knowledge and skills to start out or build upon your career. The curriculum gave me a leg up as I embarked on a career in privacy, and helped me as I continued to build on my education through other certifications and develop into the privacy professional I am today.
    — Brad Poirier

Who should take this Privacy, Access, and Information Management certificate?
  · You're a working professional who wants to pivot into a privacy role or change careers and go into privacy
  · You're a professional who's recently been hired to work on privacy and access issues and needs training
  · You're a recent degree graduate looking for an in-demand career specialization

What will you learn while taking the Privacy, Access, and Information Management certificate?
You'll learn how to:
  · Leverage technology as the driving force for future policy issues
  · Plan and schedule the project in a group setting using the critical path method (CPM)
  · Identify, plan, and manage project risk and quality using analytical tools and methods
  · Implement financial controls to accounting, budgeting, and cost management systems
  · Organize self-managing teams to build products in agile and mobile project environments

PRIVACY, ACCESS, & INFORMATION MANAGEMENT

Certificate Requirements

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

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

Admission Criteria

Recommended:
- Ontario Secondary School Diploma (OSSD) or equivalent
  - With six Grade 12 U or M credits
  - With a minimum average of 60 percent
OR
- Mature student status

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Financial Support
The Chang School offers both merit-based awards and need-based financial aid. This certificate is not eligible for the Ontario Student Assistance Program (OSAP).

Questions?
Contact Client Services ce@torontomu.ca

Required Courses

- ❑ CLAW 401 Information Access and Privacy Protection
- ❑ CZIT 427 Data and Info. Mgmt for Privacy
- ❑ CZLW 327 Privacy By Design
- ❑ CZLW 527 Applying Privacy and Access

Electives (select 2)

- ❑ CDPR 100 Public Relations Principles
- ❑ CHIM 305 Introduction to Health Informatics
- ❑ CITM 301 IT Infrastructure
- ❑ CITM 820 Information Systems Security and Privacy
- ❑ CLAW 122 Business Law
- ❑ CLAW 402 Health Information Access and Privacy
- ❑ CMHR 405 Organizational Behaviour
- ❑ CPPA 403 e-Government

PROFICIENCY IN FRENCH

Courses can be completed online and in-person.

Delivery	Hybrid
Courses	6
Length	1 to 2 years
Cost	$3,000–$3,800

LEARN TO SPEAK FRENCH LIKE A PRO WITH A PROFICIENCY IN FRENCH CERTIFICATE

Have you ever been in the middle of applying for your dream job – only to discover that you need to know how to speak French? Now, it's time to make that dream happen. The Certificate in Proficiency in French offered by The Chang School gives you everything you need to learn how to speak, write, and understand French.

After completing our French program, you'll have reached the C1-C2 proficiency level in the rating used by the Council of Europe's Framework of Reference for Languages (CEFR). And soon, your career opportunities can skyrocket. Job interviews. Employment offers. Promotions. Raises. All these things may come a little easier, thanks to your French certificate and new bilingual status. Plus, your French skills aren't just helpful in the Canadian job market: your bilingual abilities can help you flourish in other Francophone countries and roles as well.In addition to becoming fluent in French, you'll greatly improve your communication skills, and gain transferable skills in reading and composition, critical analysis, and textual organization.

Our certificate can get you there in as little as a year. Plus, our French classes are mostly online so you can complete your classes at your own pace, alongside any work or family responsibilities you may have.

We've made it as stress-free as possible to learn French, so why not get started today? Your dream job awaits.

Who should take this Proficiency in French certificate?
- You want to become proficient in spoken and written French and expand your career options in business, government, the media, law, or other fields

What will you learn while taking the Proficiency in French certificate?
You'll learn how to:
- Master French grammar and vocabulary, from beginner to advanced level
- Speak, read, write, and understand French
- Gain a better appreciation of French and the Francophone world through cultural readings like short fictional texts and media excerpts

Certificate Requirements

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

**If you enter the certificate at a proficiency level below CFRE 501, you must successfully complete 6 courses. However, if granted advanced placement through the placement assessment, you only need to complete 4 advanced level courses (CFRE 501 or higher) to fulfill the certificate requirements.

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

Admission Criteria

- Successful completion of Introductory French I (CFRE 101)
  - With a minimum grade of C+

OR

- Admission by placement assessment and interview

Before enrolling in your first course, you must complete our online placement assessment. The results of this placement assessment will help determine which course you should enrol in first.

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Financial Support

Awards and Bursaries
The Chang School offers both merit-based awards and need-based financial aid.

Ontario Student Assistance Program (OSAP)
This certificate program is OSAP-eligible. To learn more, visit the Student Financial Assistance website.

Questions?
Contact Client Services ce@torontomu.ca

Lower and Intermediate Level Courses

- ❑ CFRE 201 Introductory French II
- ❑ CFRE 301 Intermediate French I
- ❑ CFRE 401 Intermediate French II
- ❑ CFRE 402 French Conversation and Pronunciation

Advanced Level Courses

- ❑ CFRE 501 Speaking and Writing French I
- ❑ CFRE 502 Communication and Business French
- ❑ CFRE 505 French Language and Culture
- ❑ CFRE 507 English-French Translation I
- ❑ CFRE 508 Intro to 20th C French Literature I
- ❑ CFRE 509 Franco-Canadian Literature I
- ❑ CFRE 510 Effective Writing
- ❑ CFRE 515 Introduction to Business French
- ❑ CFRE 601 Speaking and Writing French II
- ❑ CFRE 602 Business French in Practice
- ❑ CFRE 605 Francophone Language and Culture
- ❑ CFRE 607 English-French Translation II
- ❑ CFRE 608 Intro to 20th C French Literature II
- ❑ CFRE 609 Franco-Canadian Literature II
- ❑ CFRE 610 Cultural Context of Writing
- ❑ CFRE 701 French for Today
- ❑ CFRE 704 Intro to Franco-Canadian Culture I
- ❑ CFRE 706 The Life and Times of the French Language
- ❑ CFRE 707 Introduction to French-English Translation
- ❑ CFRE 801 French and New Media
- ❑ CFRE 803 French Theatre: 20th C and Contemporary
- ❑ CFRE 804 Intro to Franco-Canadian Culture II
- ❑ CFRE 805 French Language Teaching Methodologies
- ❑ CFRE 903 The Francophone Short Story

PROFICIENCY IN SPANISH

Courses can be completed online and in-person.

Delivery	Hybrid
Courses	6
Length	2 years
Cost	$3,000–$3,300

LEARN TO SPEAK SPANISH LIKE A PRO WITH A PROFICIENCY IN SPANISH CERTIFICATE

Embrace a whole new world of possibility by learning Spanish. It's one of the most spoken languages globally, leading to many exciting career opportunities for Spanish speakers. Could that be you? Start your Spanish journey with The Chang School and enjoy our unique Certificate in Spanish Proficiency.

Unlike most college and university classes that focus on conversational Spanish, our Certificate in Spanish Proficiency gives a deeper, more holistic education in Spanish. You'll not only master Spanish, but enrich your cultural knowledge and soft skills as well. We've partnered up with the Hispanic community to provide more real-world opportunities to polish your oral and written Spanish.This Spanish certificate also includes courses for specific career goals, whether you're thinking about going into translation, business or teaching, or just want to expand your professional network. Here at The Chang School, we prioritize hands-on, experiential learning. Our translation learners translate websites and blogs from English to Spanish and vice versa, and our business learners interview fluent professionals in Spanish. Our teaching learners observe and teach classes, and are mentored by Spanish instructors.

What fields do you want to explore? How can Spanish advance your current career? Once you complete our Certificate in Spanish Proficiency, you'll be proficient in Spanish and will be able to use the language in any workplace where it's needed. (And even if you're retired, Spanish can come in handy. Learning a new language is a great way to stay sharp and keep your brain busy.)

Our Spanish certificate can be completed in as little as two years, and some courses can be conducted online as well. You'll be speaking Spanish in no time. So, are you ready to get started? Vamos!

Who should take this Proficiency in Spanish certificate?
- You want to become proficient in spoken and written Spanish
- You're an older adult looking to learn a new language, build community, and boost your brainpower

What will you learn while taking the Proficiency in Spanish certificate?
You'll learn how to:
- Actively and confidently engage in performing different communication skills both oral and written
- Employ a greater understanding and awareness of Hispanic cultures and the diverse peoples who speak Spanish

Meet Our Learners

I felt motivated to participate in class discussions, learn and practice. I was even able to learn Spanish business jargon, which is helpful for my business with Spanish-speaking clients. I love how clients and friends now complement me on my abilities. That's when I tell them about The Chang School and how it's helped me improve in Spanish.
— Julian Liurette

Certificate Requirements

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

**You may be exempted from completing the required courses if you completed 4 courses at a higher level than CSPN 401. If granted advanced placement through the placement and assessment interview with the academic coordinator, you only need to complete 4 advanced level courses (CSPN 402 or higher) to fulfill the certificate requirements

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

Admission Criteria

- Successful completion of Introductory Spanish I (CSPN 101)
  - With a minimum grade of C+

OR

- Admission by placement assessment and interview

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Financial Support

Awards and Bursaries
The Chang School offers both merit-based awards and need-based financial aid.

Ontario Student Assistance Program (OSAP)
This certificate program is OSAP-eligible. To learn more, visit the Student Financial Assistance website.

Questions?
Contact Client Services ce@torontomu.ca

Required Courses

- ❑ CSPN 201   Introductory Spanish II
- ❑ CSPN 301   Intermediate Spanish I
- ❑ CSPN 401   Intermediate Spanish II
- ❑ CSPN 501   Advanced Spanish I
- ❑ CSPN 601   Advanced Spanish II

Electives (select 1)

- ❑ CSPN 402   Spanish Conversation and Pronunciation
- ❑ CSPN 510   Effective Writing
- ❑ CSPN 515   Introduction to Business Spanish
- ❑ CSPN 610   Spanish Writing Composition
- ❑ CSPN 702   Communication in Business Spanish
- ❑ CSPN 704   Latin American Culture I
- ❑ CSPN 705   The Boom in Latin American Literature
- ❑ CSPN 707   Spanish-English Translation
- ❑ CSPN 708   Contemporary Spanish Fiction
- ❑ CSPN 710   History of the Spanish Language
- ❑ CSPN 804   Latin American Culture II
- ❑ CSPN 810   Cultural Context of Writing

PROGRAM EVALUATION

Certificate can be completed online.

Delivery	Online
Courses	4
Length	1 to 1.5 years
Cost	$3,800–$3,900

EXPLORE A CAREER IN APPLIED RESEARCH WITH A PROGRAM EVALUATION CERTIFICATE

Revisiting and refining are an important part of making something better. The Chang School is proud to help train more professionals in this growing field with our Postgraduate Certificate in Program Evaluation.

Do you have an advanced degree in research-intensive fields like business, humanities, health, arts, social science, education, or life sciences but want a career outside academia? Or are you already working in a related role and need a credential to boost your experience? Program evaluation is a great option, with many different fascinating career paths and roles available.The program evaluation certificate's learning outcomes are mapped to Canadian Evaluation Society competencies, and will teach you the fundamentals of program evaluation, applied research, stakeholder and project management, and organizational dynamics. All our program evaluation courses have an experiential learning component built in, too, so the assignments mimic the kind of deliverables expected of a working evaluator.

You can work in a wide array of sectors, including federal and provincial government, education, law enforcement, community services, Indigenous advocacy groups, charities, think tanks and research groups, and management consultancies.

Our program also has a strong focus on equity, diversity, and inclusion. You'll learn how to use the tools and methodologies of evaluation appropriately, equitably, and ethically in the evaluation process, and how to work with vulnerable populations and traditionally marginalized groups.

Excited to start or boost your program evaluation career? You can complete your program evaluation certificate online and finish it in as little as one year. If you're ready to help create more fair and equitable processes and programs, come start this certificate today.

Who should take this Program Evaluation certificate?
- You're an advanced degree-holder in a research-intensive field such as business, humanities, health, arts, social science, education, or life sciences and want a career outside academia
- You're already employed in a related or allied role in program evaluation and require an additional credential or specialization for career pivoting or advancement

What will you learn while taking the Program Evaluation certificate?
You'll learn how to:
- Apply the core philosophies, theories, nuances, and ethical considerations involved in the practice of evaluation
- Use the tools and methodologies of evaluation appropriately, equitably, and ethically in the evaluation process
- Assess the needs of a client, define the scope of an evaluation, and select the design the best possible methodology for a given evaluation
- Understand the impact of social and political systems on vulnerable populations, such as the elderly, people with disabilities, the incarcerated, and unhoused, and historically marginalized groups, such as Indigenous people, women, gender and sexual minorities, and racialized individuals, and account for these impacts during an evaluation
- Make relevant and actionable recommendations that support the desired impacts or outcomes

PROGRAM EVALUATION

Certificate Requirements

- 4 required courses

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

Admission Criteria

- Undergraduate degree

Note: This certificate is not post-graduation work permit (PGWP) eligible

Required Courses

- ❑ CYPG 620   Program Evaluation Foundations
- ❑ CYPG 621   Applied Research in Program Evaluation
- ❑ CYPG 622   Stakeholders and the Evaluation Process
- ❑ CYPG 623   Program Evaluation in Context

PROGRAMMING FOR GAME DEVELOPMENT

Certificate can be completed online.

Delivery	Online
Courses	4
Length	8 months to 1.5 years
Cost	$5,300–$5,600

LEVEL UP YOUR VIDEO GAME CAREER WITH A PROGRAMMING FOR GAME DEVELOPMENT CERTIFICATE

Fortnite. Minecraft. Grand Theft Auto. The Legend of Zelda. Video game programmers are an integral part of bringing these worlds to life. Want to learn how to create the software and code that powers video games? The Chang School's new certificate in Programming for Game Development will give you the education and experience to land that first entry-level job – or advance further – in the game development field.

Our game development courses focus on must-have technical knowledge, like how to program in C# and C++ in a game engine environment. You'll learn how to perform development activities within game production pipelines at both AAA and small independent studios.

You'll master the industry-specific activities you need to thrive in a video game development studio, including programming game features, prototyping, debugging, troubleshooting and beta testing, along with crucial interpersonal and workflow skills. Our certificate also highlights the ethical and diversity, inclusion, equity, and accessibility concepts that will help you program more high-quality, inclusive games. Video game development is a portfolio-driven industry, so we make sure you graduate with a game programming portfolio that will make you stand out from the competition.

Already working in the video game development industry? If you're in an entry-level or non-technical role, like game designer, this game development program can help you advance your career or reposition yourself in a technical video game development role.

You can complete our game programmer certificate online, fitting coursework into your busy schedule, and finish the whole program in as little as eight months.

We're here to help you press start on an exciting new video game programmer career today.

Who should take this Programming for Game Development certificate?
- You're a gamer who'd like to work in the video-game industry as a game developer
- You're already working in the video game industry in a junior technical role and would like to earn a credential to advance into a mid-level technical role
- You'd like to reposition into a technical role within the video game industry
- You're a self-taught programmer who wants to hone your existing skills and gain industry-specific knowledge to boost your employability
- You're a recent participant in, or graduate from, a computing or technology-related undergraduate or college program who wishes to enter the video game industry and wants to get an industry-related credential to improve your job prospects and stand out in the job market

What will you learn while taking the Programming for Game Development certificate?
You'll learn how to:
- Utilize the technical and programming skills like C#, C++, 3D Unity and UnReal that are required to work in a studio environment in a technical video game developer role
- Build a high-quality professional portfolio to showcase the skills needed for an entry-level position in the video game industry
- Use a game engine to create video games or elements of video games
- Perform game development activities within game production pipelines at both AAA and small independent studios
- Work effectively in a game studio or similar environment by communicating effectively, providing and receiving feedback, and adhering to production schedules and budgets
- Use the video game medium to create compelling and engaging player experiences
- Execute industry-specific activities like programming game features, prototyping, debugging, troubleshooting and beta testing

Required Courses

- ❑ CKCS 510   Technical Foundations for Game Developers
- ❑ CKCS 520   Simulating Force and Motion in Games
- ❑ CKCS 530   Video Game Mechanics and Design
- ❑ CKCS 540   The Video Game Studio Environment

PROJECT MANAGEMENT

Certificate can be completed online.

Delivery	Online
Courses	8
Length	8 months to 2 years
Cost	$6,100–$7,200

BECOME A PRODUCTIVITY PROFESSIONAL WITH A PROJECT MANAGEMENT CERTIFICATE

Project managers are in high demand in Canada and around the world. The Certificate in Project Management at The Chang School is a great way to jumpstart your career in project management in Canada – or even take your project management career to the next level. The certificate will give you the project manager training you need to run projects smoothly and efficiently, oversee teammates and workflow, and manage any roadblocks and risks that may arise during a project.

Our certificate is well-respected in the field, thanks to the more in-depth project management training our industry-leader instructors provide. You'll master basics like planning and scheduling, quality management, leadership, and project cost management.From there, we offer many specialized online project management courses so you can learn more about the industry you're most drawn to, whether it's architecture, engineering, construction, business, information management, or community and health services. We also offer a project management internship course that will give you hands-on industry experience that you can highlight on your resume.

Our certificate is an excellent way to prepare for the Project Management Institute (PMI) Certified Associate in Project Management (CAPM)® and Project Management Professional (PMP)® certifications as well.

There is a whole world of projects out there that need savvy professionals to manage them. Let's get started!

Meet Our Learners

This certificate has been a transformative asset in my career. It not only deepened my project management knowledge and sharpened my skills but also provided invaluable hands-on experience and served as the foundation for my CAPM certification. This qualification opened doors, resulting in numerous job callbacks.
　　—Pirathanya Arulpirabakar

Who should take this Project Management certificate?
- You're a working professional who plans to transition into project management
- You're a project-management professional who wants to write the exam for the PMI CAPM or PMP certification in Canada
- You're a recent degree graduate striving to be more competitive in the marketplace

What will you learn while taking the Project Management certificate?
You'll learn how to:
- Recognize the concepts and basic functions of the project management body of knowledge
- Plan and schedule the project using predictive, **Delivery**　Hybrid, and adaptive techniques
- Identify, plan, and manage project risk and quality using analytical tools and methods
- Implement financial controls for accounting, budgeting, and cost-management systems
- Organize self-managing teams to build products in agile and mobile project environments
- Utilize various AI tools (PMI Infinity™, Copilot, ChatGPT, NotebookLM) to simulate real-life project management
- Apply prompt engineering to effectively leverage Generative AI
- Evaluate how AI-based prompt engineering and tools strengthen project planning, decision-making, and execution
- Implement fundamental AI approaches to streamline workflows, optimize efficiency, and inform strategic decisions

Certificate Requirements

- 5 required courses
- Selected stream**
- 1 39-hour elective***
- Cumulative grade point average (GPA) of 1.67+

**This certificate offers streams in Project Management; Architecture, Engineering, and Construction; Business and Information Management; and Community and Health Services Management. You must fulfil the requirements of one of these four areas as listed.

***The elective category only applies to the Architecture, Engineering, and Construction; Business and Information Management; and Community and Health Services Management streams. If you are in the Project Management Stream, you do not need to complete this category.

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

Admission Criteria

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

OR
- Mature student status with relevant professional experience

Required Introductory Course (select 1)

If you plan to pursue the ITM degree, you should take CITM 750 (as CTEC 210 cannot be used towards the ITM degree).

- ❑ CITM 750   IS Project Management
- ❑ CTEC 210   Fundamentals of Project Management

Required Core Courses

- ❑ CKPM 203   Planning and Scheduling
- ❑ CKPM 209   Project Risk and Quality Management
- ❑ CKPM 211   Leadership in Project Management
- ❑ CKPM 212   Project Cost and Procurement Management

Project Management Stream (select 3)

Complete 3 the following courses to achieve the Project Management Stream.
- ❑ CCMN 114   Short Management Reports
- ❑ CHSM 308   Project Management - Long Term Care
- ❑ CINT 905   Conflict Resolution in Community Services
- ❑ CKPM 217   Agile Project Management
- ❑ CMHR 405   Organizational Behaviour

Architecture, Engineering, and Construction Stream

Complete the following courses to achieve the Architecture, Engineering, and Construction Stream. In addition to the courses below, select 1 course from the Elective category.
- ❑ CKPM 213   Management of Projects in the AEC
- ❑ CKPM 214   Project Development and Control

Business and Information Management Stream

Complete the following courses to achieve the Business and Information Management Stream. In addition to the courses below, select 1 course from the Elective category.
- ❑ CITM 305   Systems Analysis and Design
- ❑ CITM 410   Business Process Design

Community and Health Services Management Stream (select 2)

Complete 2 of the following courses to achieve the Community and Health Services Management Stream. In addition to the courses below, select 1 course from the Elective category.
- ❑ CHSM 301   The Healthcare Systems
- ❑ CHSM 305   The Management Cycle
- ❑ CHSM 307   Principles of Long Term Care Service Del.

Electives: 39-Hour Courses (select 1)

This category only applies to the Architecture, Engineering, and Construction; Business and Information Management; and Community and Health Services Management streams. If you are in the Project Management Stream, you do not need to complete this category. 2 19.5-hour courses may be completed as the equivalent of 1 39-hour course.
- ❑ CCMN 114   Short Management Reports
- ❑ CHSM 308   Project Management - Long Term Care
- ❑ CINT 905   Conflict Resolution in Community Services
- ❑ CKPM 216   Project Management Internship
- ❑ CKPM 217   Agile Project Management
- ❑ CKPM 218   Enterprise Project Management
- ❑ CKPM 219   Mobile Project Management
- ❑ CKPM 220   Rescuing Failing Projects
- ❑ CKPM 221   From Technical to Managerial
- ❑ CMHR 405   Organizational Behaviour

PROJECT MANAGEMENT FOR TECHNICAL PROFESSIONALS

Certificate can be completed online.

Delivery	Online
Courses	4
Length	8 months
Cost	$3,100–$3,500

MASTER TECHNICAL PROJECT MANAGEMENT WITH A PROJECT MANAGEMENT FOR TECHNICAL PROFESSIONALS CERTIFICATE

Are you ready to evolve from a technical role into technical project management? The Chang School has created a unique certificate that will help you make the transition from purely tech into technical project management as smooth and stress-free as possible. The project management industry is booming right now, and our Certificate in Project Management for Technical Professionals will prepare you for all kinds of in-demand technical project manager roles, like project leader, development manager, and technical lead.

We want to get you in the workforce and a rewarding career as a technical project manager quickly and seamlessly. This is why our certificate is online and can be completed on your own timeline, and in as little as two semesters, or eight months.Are you an Internationally Educated Professional (IEP) eager to get some training in Canadian technical project management? We can help you bridge your international expertise into the Canadian market and help you become comfortable with Canadian workplace culture and norms.

Technical project management coursework covers everything from specialized business communication techniques to agile project management, along with planning and scheduling and project cost and procurement management. You'll also receive extensive leadership training.

Planning on writing the Project Management Professional (PMP®) examination offered by the Project Management Institute? This certificate will help you meet the educational requirements and is the perfect preparation for acing that exam.

There are so many technical projects starting every day that need strong stewardship and smart leaders. Are you ready to become one?

Meet Our Learners

The certification program included practical exercises, case studies, and simulations that allowed me to apply theoretical knowledge to real-world scenarios. This hands-on approach helped me develop essential skills. Plus, I met wonderful professors and classmates during my time at TMU that I can now call friends.
— Henmary Acosta

Who should take this Project Management for Technical Professionals certificate?
- You're a professional with a technical background in information technology, engineering, science, finance, or other similar fields
- You're an internationally educated professional with an undergraduate degree and a minimum of two years of professional experience in information technology, engineering, science, finance, or other similar fields
- You want to prepare for the PMP exam

What will you learn while taking the Project Management for Technical Professionals certificate?
You'll learn how to:
- Describe the concepts and basic functions of the project management body of knowledge
- Manage project scope, quality, time, cost, risk, procurement, resources, and communication
- Assemble self-managing teams to build products while responding to ever-changing requirements
- Prepare a project schedule, and install and operate a planning and scheduling system
- Utilize solid leadership and other soft skills and apply them to project situations
- Refine your analytical, writing, presentation, and problem-solving skills
- Utilize various AI tools (PMI Infinity, Copilot, ChatGPT, NotebookLM) to simulate real-life project management
- Apply prompt engineering to effectively leverage Generative AI
- Evaluate how AI-based prompt engineering and tools strengthen project planning, decision-making, and execution
- Implement fundamental AI approaches to streamline workflows, optimize efficiency, and inform strategic decisions

Note: Learners who registered in the certificate prior to July 2, 2023 should refer to the archived calendar for the curriculum details of your year of registration. If you'd like to consider following the revised curriculum and need help in reviewing your options, reach out to our Client Services team at ce@torontomu.ca.

PROJECT MANAGEMENT FOR TECHNICAL PROFESSIONALS

Certificate Requirements

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

**Select 1 courses from Electives – Group A and 1 course from Electives – Group B

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

Admission Criteria

Applicants will have to be IEPs and must be an accepted and registered participant of the Middle Level Managers (MLM) Program housed in The Chang School
OR
have a degree in a technical field and a minimum of two years of work experience.

Admission application for IEPs who apply for enrollment in the MLM Program

An admission application is required for this program. A pre-approval process will be conducted by the Program Manager, including an information and orientation session.

For more information, contact mlm@torontomu.ca.

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Financial Support

The Chang School offers both merit-based awards and need-based financial aid. This certificate is not eligible for the Ontario Student Assistance Program (OSAP).

Questions?
Contact Client Services ce@torontomu.ca

Required Course

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

Electives – Group A (select 1)

- ❑ CKPM 203   Planning and Scheduling
- ❑ CKPM 212   Project Cost and Procurement Management

Electives – Group B (select 1)

- ❑ CDCE 400   Exploring Leadership Skills
- ❑ CKPM 211   Leadership in Project Management

PSYCHOLOGY

Certificate can be completed online.

Delivery	Online
Courses	8
Length	1 year
Cost	$4,500–$4,800

MASTER THE MYSTERIES OF HUMAN MOTIVATION WITH A PSYCHOLOGY CERTIFICATE

Studying psychology can help you learn more about yourself, the people around you, and the world at large. This kind of psychology expertise is invaluable to employers looking to make better business decisions, create better products, and foster better workplaces. And if you're looking to advance your career, The Chang School Certificate in Psychology can take your resume to the next level.

There is no other university in Ontario that offers a general psychology certificate for continuing education learners. Our psychology certificate program is unique in that it offers learners the opportunity to tailor your learning to your passions and career goals.Coursework covers a broad spectrum of psychology topics, from psychopharmacology and child development to human brain circuitry and personality theory. You can pick electives that align with your career goals and personal interests; there's psychology classes in a wide array of subjects, including addictions, law, thinking, sports, immigration, human sexuality, and prejudice.

Looking to get into the booming field of diversity, equity, and inclusion? We also offer courses in psychology of gender, immigration, and prejudice, along with cross-cultural psychology.

You'll also get the opportunity to participate in psychological research, and produce a capstone project where you work alongside a faculty member to complete an independent study and produce a comprehensive paper in an area you're passionate about.

Plus, you can complete our certificate in psychology online, and at your own pace, allowing you to schedule your coursework on a timeline that works with your other responsibilities.

A good foundation of knowledge about psychology can be applied to practically every career and work setting. Where will your Psychology certificate take you?

Who should take this Psychology certificate?
- You want to enter the psychology field, or expand your career opportunities with an increased knowledge of psychology
- You'd like to use the degree-credit courses toward an undergraduate degree in psychology

What will you learn while taking the Psychology certificate?
You'll learn how to:
- Understand the methods, concepts, theories, and applications of psychology
- Examine basic principles of psychology and how to apply them to everyday experiences
- Master statistical concepts and analyze research data
- Produce a comprehensive paper in a selected area

Certificate Requirements

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

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

Admission Criteria

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

OR
- 3 years of professional experience in business, community service, or industry

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Financial Support

Awards and Bursaries
The Chang School offers both merit-based awards and need-based financial aid.

Ontario Student Assistance Program (OSAP)
This certificate program is OSAP-eligible. To learn more, visit the Student Financial Assistance website.

Questions?
Contact Client Services ce@torontomu.ca

Required Courses

You may only select one of CPSY 102 or CPSY 105

- ☐ CPSY 102   Introduction to Psychology I
- ☐ CPSY 105   Perspectives in Psychology
- ☐ CPSY 202   Introduction to Psychology II
- ☐ CPSY 411   Research Methods and Statistics I
- ☐ CPSY 612   Independent Study

Electives (select 4)

- ☐ CPSY 214   Psychopharmacology
- ☐ CPSY 215   Psychology of Addictions
- ☐ CPSY 300   Psychology and Law
- ☐ CPSY 302   Child Development
- ☐ CPSY 304   Psychology of Gender
- ☐ CPSY 308   Psychology of Thinking
- ☐ CPSY 324   Biological Psychology
- ☐ CPSY 325   Psychological Disorders
- ☐ CPSY 335   Clinical Psychology
- ☐ CPSY 402   Adult Development
- ☐ CPSY 412   Human Brain Circuitry
- ☐ CPSY 504   Social Psychology
- ☐ CPSY 505   Personality Theory
- ☐ CPSY 518   Environmental Psychology
- ☐ CPSY 602   Developmental Psychopathology
- ☐ CPSY 606   Abnormal Psychology
- ☐ CPSY 607   Drugs and Human Behaviour
- ☐ CPSY 614   Psychology of Sport
- ☐ CPSY 620   Psychology of Immigration
- ☐ CPSY 621   Psychology of Human Sexuality
- ☐ CPSY 706   Positive Psychology
- ☐ CPSY 707   Models of Stress and Adaptation
- ☐ CPSY 802   Death, Dying and Bereavement
- ☐ CPSY 805   Adjustment, Stress and Coping
- ☐ CPSY 806   Behaviour Modification
- ☐ CPSY 807   Psychology of Prejudice
- ☐ CPSY 808   Community Psychology
- ☐ CPSY 941   Cross Cultural Psychology

PUBLIC ADMINISTRATION & LEADERSHIP

Includes online and in-person courses.

Delivery	Hybrid
Courses	6
Length	1 year
Cost	$3,600–$3,900

HELP ADVOCATE FOR POSITIVE CHANGE WITH A PUBLIC ADMINISTRATION AND LEADERSHIP CERTIFICATE

Our government needs more leaders: are you ready to step up and become one of them? The Chang School Certificate in Public Administration and Leadership offers all the training you need to make your public-sector career soar.

This public administration certificate offers flexible scheduling and both online and classroom coursework, so you can select classes that work with your schedule and preferences. Our public administration courses will teach you everything you need to know about government operations and policy-making. Plus, you'll delve into the specific challenges of 21st-century government and how to manage them. Career progression is important, so this public administration program also provides training in how to develop your government career and rise up the leadership ladder.Did you know that, according to Statistics Canada, public-sector jobs make up 20 percent of all jobs in Canada? There are many career opportunities in this field; the public sector needs trained leadership and governance professionals to keep government running smoothly. You could work for a community-based organization that works with governments; international governmental organizations, like the United Nations or World Bank; non-governmental organizations; government department policy units; or as a political aide. Even the private sector needs employees with this type of certificate in public administration; you can work for companies that have extensive interactions with domestic or foreign governments, or that do public research.

We're excited to help you on your journey to become a public-sector leader. Opportunity awaits.

Who should take this Public Administration and Leadership certificate?
- You're working in government or the nonprofit sector and want to build your skills to move up in your career
- You have an undergraduate degree and wish to deepen your understanding of key aspects of public sector management and leadership
- You'd like to pursue graduate studies in public administration

What will you learn while taking the Public Administration and Leadership certificate?
You'll learn how to:
- Recognize key issues in today's rapidly evolving public sector
- Participate in the Canadian public policy-making process
- Interpret contemporary social, economic, and environmental policy
- Apply public sector leadership
- Analyze the statutory and regulatory basis of Canadian public administration
- Rate and evaluate programs
- Work within budgetary processes
- Design effective accountability
- Rank the types of partnerships between government and other agents in the delivery of public goods
- Assess the quality of intergovernmental affairs
- Recognize and select the most appropriate instruments for policy and program delivery

Certificate Requirements

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

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

Admission Criteria

Required:
- An undergraduate degree

Note: If you have no background in politics or public administration, or no experience in the public sector, you may be required to complete a preparatory course prior to admission, like CPPA 120.

Admission Application
To apply for approval to register in the Certificate in Public Administration and Leadership, complete and submit this online program pre-approval form. Once you've completed and submitted this online form, a representative from The Chang School will contact you to provide next steps.

Note: You'll also be required to submit academic transcripts to Dr. Patrice Dutil, Academic Coordinator. Instructions for submitting your transcripts are in the Education section of the pre-approval form.

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Financial Support

Awards and Bursaries
The Chang School offers both merit-based awards and need-based financial aid.

Ontario Student Assistance Program (OSAP)
This certificate program is OSAP-eligible. To learn more, visit the Student Financial Assistance website.

Questions?
Contact Client Services ce@torontomu.ca

Required Courses

- CPPA 211   Public Policy
- CPPA 404   Issues in Public Administration
- CPPA 501   Public Sector Leadership

Electives (select 3)

- CPPA 301   Administrative Law
- CPPA 303   Public Budget Policy/Politics
- CPPA 335   Theories of Bureaucracy
- CPPA 401   Collaborative Governance
- CPPA 402   Program Planning and Evaluation
- CPPA 403   e-Government
- CPPA 411   Advanced Public Policy
- CPPA 414   Comparative Public Policy
- CPPA 425   Intergovernmental Relations
- CPPA 490   Public Administration Themes
- CSCI 243   Continuity and Risk Management

PUBLIC RELATIONS

Certificate can be completed online.

Delivery	Online
Courses	9
Length	1 to 2 years
Cost	$7,600–$7,700

CHANGE THE CONVERSATION WITH A PUBLIC RELATIONS CERTIFICATE

Social media. Influencer management. Content creation. The Chang School has crafted a cutting-edge curriculum for our Certificate in Public Relations that will provide you with all the tools you need to thrive in the ever-changing PR industry.

Our PR program features instructors with tons of exciting real – world experience in PR director and executive roles. You'll learn everything from key PR principles and stakeholder-handling skills to analytics and SEO best practices while building a roster of industry mentors and contacts.It's an online public relations certificate, so you can complete your public relations courses online at your own pace while working full-time or part-time. (Plus you can finish it in as little as a year.) Enjoy connecting with other students and establishing your network of fellow public relations specialists. Want to collaborate in person? We also offer office hours where you can meet and work together with other learners and your instructor.

Finish off your Public Relations certificate with a capstone project that features a real – world project-the perfect portfolio piece to show off your new PR strategy skills and wow future employers.

Looking for public relations certification? If you need to write the Canadian Public Relations Society (CPRS) or International Association of Business Communicators (IABC) accreditation examinations, the Public Relations certificate can help you prepare.

Come join us – and get ready to change the conversation.Meet Our Learners

Who should take this Public Relations certificate?
- You're a recent graduate of a diploma or degree program who wants to kickstart your public relations career in Canada
- You're working in PR or communications and want to boost your skills or get a promotion and need the flexibility do your public relations certificate online
- You're mid-career but looking to change your career and pivot into a PR or communications role

What will you learn while taking the Public Relations certificate?
You'll learn how to:
- Create PR management strategies for different types of organizations
- Establish and build relationships with senior management and external stakeholders, including media
- Critically analyze PR issues
- Research, design, implement, and manage internal and external PR programs
- Write for a wide range of internal and external audiences
- Craft effective public and business presentations
- Act as a public spokesperson for a brand

Note: There has been a Public Relations certificate curriculum update. Learners who registered for the certificate prior to July 2, 2022 should refer to the archived calendar for the curriculum details for your registration year. Visit the archived calendar.

You can find the course codes that have replaced the codes from the previous curriculum in the conversion table.

PUBLIC RELATIONS

Certificate Requirements

- 7 required courses
- 2 19.5-hour electives
- Cumulative grade point average (GPA) of 1.67+

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

Admission Criteria

Recommended:
- An undergraduate degree

OR
- A 3-year community college diploma

OR
- Mature-student status with a high school diploma and 4 years of progressive work experience in public relations practice, or in a business, professional, or technical field

Financial Support

The Chang School offers both merit-based awards and need-based financial aid. This certificate is not eligible for the Ontario Student Assistance Program (OSAP).

Questions?
Contact Client Services ce@torontomu.ca

Required Courses

- ❑ CDPR 200   Public Relations Foundations
- ❑ CDPR 204   Planning, Programming and Budgeting
- ❑ CDPR 205   Communications Research and Campaign ROI
- ❑ CDPR 206   Media Relations
- ❑ CDPR 208   Social Media in Public Relations
- ❑ CDPR 211   Strategic Storytelling
- ❑ CDPR 300   Public Relations Capstone

Electives: 19.5-Hour Courses (select 2)

- ❑ CDPR 210   Reputation Management
- ❑ CDPR 213   Internal Communications Management
- ❑ CDPR 216   Public Relations Ethics
- ❑ CDPR 217   Crisis Communication

PUBLISHING

Certificate can be completed online.

Deliver	Online
Courses	8
Length	1 to 2 years
Cost	$7,400–$8,200

EXPLORE THE EXCITING WORLD OF PUBLISHING WITH A PUBLISHING CERTIFICATE

Note: CDPB 995 – Publishing Pathways: Editorial Intensive is available for Spring/Summer 2025. Gain professional-level editorial training by completing this 10-week intensive program.

Working in publishing is a dream for many people. Why not make it your reality? At The Chang School we offer Canada's largest and most flexible professional training program for the publishing industry. We're also the only program to offer a part-time and fully online certificate, giving our learners maximum flexibility in getting their professional training and entering the industry at their own pace. You can finish the Certificate in Publishing in as little as one year, or take your time to complete it over as long as five years.

This program will teach you the skills and knowledge to succeed in publishing. We offer more than 25 publishing courses online that cover the latest in print and digital publishing, including overviews of industry sectors and skills-based training in editing; production and design; sales, marketing and publicity; literary rights management; and the business of book publishing. You can tailor your course selection to prepare for the career you're most passionate about.Networking is crucial in the publishing industry. Our instructors are all working professionals in publishing and they, along with our academic coordinators, are happy to act as mentors and provide guidance during the program and in the future as you build your career. (Since our program has been running since 1990, there are three decades of Publishing certificate alumni in the industry you can reach out to as well.) We'll also share paid job opportunities and publishing internships with you.

Why not join the publishing life? Start your story anew.

Who should take this Publishing certificate?
- You're looking for professional training for a career in the publishing industry
- You currently work in the publishing industry and want to advance your career
- You currently work in corporate, non-profit, or government communications where publishing skills are required
- You're considering a career change and want to try some editorial or other publishing courses
- You're interested in setting up a freelance editorial business
- You're interested in self-publishing

What will you learn while taking the Publishing certificate?
You'll learn about:
- The book publishing industry
- Industry sectors
- Editing
- Production and design
- Digital and online publishing
- Sales, marketing, and publicity
- Literary rights management

Certificate Requirements

- 2 required courses
- 6 39-hour electives
- 2 19.5-hour courses are considered equivalent to 1 39-hour course
- Cumulative grade point average (GPA) 1.67+

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

Admission Criteria

Recommended:
- Undergraduate degree

OR
- Mature student status with related professional experience and education

If you're an undergraduate student in your final year, contact the academic coordinators at publish@torontomu.ca

Required Courses

- ❑ CDPB 100   Publishing Overview: Trade
- ❑ CDPB 200   Publishing Overview: Education

Electives: 39-Hour Courses (select 6)

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

- ❑ CDPB 101   The Business of Book Publishing
- ❑ CDPB 102   Copy and Stylistic Editing I
- ❑ CDPB 103   Production for Books, Journals, and Reports
- ❑ CDPB 104   Introduction to Book Design
- ❑ CDPB 105   Sales and Marketing for Book Publishers
- ❑ CDPB 110   Publicity for Book Publishers
- ❑ CDPB 201   Literary Rights Management
- ❑ CDPB 202   Substantive and Stylistic Editing
- ❑ CDPB 212   Visual Skills for Publishing
- ❑ CDPB 222   Copy and Stylistic Editing II
- ❑ CDPB 312   Practical Grammar and Punctuation
- ❑ CDPB 803   Digital Publishing and Production

Electives: 19.5-Hour Courses

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

- ❑ CDPB 280   Audiobook Publishing and Production
- ❑ CDPB 285   Accessible Publishing and Production
- ❑ CDPB 300   Children's Classics in the 21st C
- ❑ CDPB 301   Publishing for Children
- ❑ CDPB 302   Government Reports
- ❑ CDPB 304   Scholarly and Reference Publishing
- ❑ CDPB 306   Trade Books: Fiction
- ❑ CDPB 309   Editing Books for Children and Teens
- ❑ CDPB 310   Proofreading for Books, Journals, and Reports
- ❑ CDPB 311   Indexing for Books, Journals, and Reports
- ❑ CDPB 313   Mktg Books for Children and Teens
- ❑ CDPB 315   Editing Recipes and Cookbooks

RETAIL MANAGEMENT

Certificate can be completed online.

Delivery	Online
Exam	In-person
Courses	6
Length	1.5 to 2 years
Cost	$3,800–$4,300

REVOLUTIONIZE THE RETAIL LANDSCAPE WITH A RETAIL MANAGEMENT CERTIFICATE

Retail is one of the largest employment sectors in Canada – and that means lots of opportunity. Now, The Chang School wants to help you rise through the retail ranks. Our unique Certificate in Retail Management provides an in-depth education in both industry basics and advanced retail skills that will send your resumé straight to the top of the pile.

Allocation analysis. Category management. Pricing analysis. Store operations. We'll teach you all the fundamentals you need to get ahead in this competitive industry. Our online retail management courses provide extensive training in must-have skills like customer relations management, along with hands-on experience in e-commerce. Looking to break into the fashion side of things? With our online courses for retail management, you'll learn everything you need to know about merchandise planning, retail buying, and visual merchandising to take your retail management career to the next level.Soft skills are crucial in getting ahead as well, which is why we weave training for these must-have skill sets throughout all coursework in this online Retail Management certificate. Boost your strategic thinking, teamwork, and advanced communication skills and boost your retail management career opportunities.

Want to get ahead sooner? You can complete it in as little as one-and-a-half years. Exams are in person, but you can work on the Retail Management certificate online, making it easy to balance new schoolwork and existing commitments. Professional development awards are available, too.

Excited to start your retail management certification? We are here to help guide you on your career journey – and can't wait to see just how far you go.
Who should take this Retail Management certificate?
- You're a retail employee in search of professional development or career advancement
- You're a working professional who wants a career change
- You're a Canadian newcomer who'd like to succeed in domestic retail organizations
- You're a manager of a small retail operation who's looking to enhance your entrepreneurial skills

What will you learn while taking the Retail Management certificate?
You'll learn how to:
- Assess key profit drivers and broad marketing and operational strategies
- Understand consumer behaviour and what defines brand value
- Apply customer relationship management (CRM) tools and best practices
- Analyze productivity issues from multiple perspectives
- Develop skills in assessing costs and profitability tied to:
  - inventory planning
  - management
  - promotions
  - consumer insights

Certificate Requirements

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

**If you demonstrate the requisite combination of education and work experience, you may apply to the academic coordinator to waive CRMG 200. If granted a waiver, you will need to complete 5 electives (instead of 4) to fulfill the certificate requirements.

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

Admission Criteria

Recommended:
- Ontario Secondary School Diploma (OSSD) or equivalent
  - With 6 Grade 12 U or M credits
AND one of the following:
- Mature student status
- A recent undergraduate degree or college diploma
- A minimum of 1 year related professional experience in the retail industry

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Financial Support

Awards and Bursaries
The Chang School offers both merit-based awards and need-based financial aid.

Ontario Student Assistance Program (OSAP)
This certificate program is OSAP-eligible. To learn more, visit the Student Financial Assistance website.

Questions?
Contact Client Services ce@torontomu.ca

Required Courses

- ❑ CRMG 200   Introduction to Retail
- ❑ CRMG 302   Retail Consumer Insight

Electives (select 4)

- ❑ CENT 500   New Venture Startup
- ❑ CGMS 200   Introduction to Global Management
- ❑ CMHR 405   Organizational Behaviour
- ❑ CMHR 523   Human Resources Management
- ❑ CMKT 100   Principles of Marketing
- ❑ CRMG 301   Retail Operations Management
- ❑ CRMG 303   Managing the Retail Workplace
- ❑ CRMG 400   Merchandise Buying and Planning I
- ❑ CRMG 434   Intro to Logistics and Supply Chain Mgmt
- ❑ CRMG 452   Visual Merchandising and Space Planning
- ❑ CRMG 806   Retailer Perspectives on Category Management
- ❑ CRMG 902   Franchising
- ❑ CRMG 907   Relationship Marketing
- ❑ CRMG 909   Merchandise Buying and Planning II
- ❑ CRMG 910   Omni-Channel Retailing
- ❑ CRMG 911   Retail Sales Management
- ❑ CRMG 916   Managing B2B Channels
- ❑ CRMG 919   Retail Data Analytics

ROBOTICS & EMBEDDED SYSTEMS

Certificate can be completed online.

Delivery	Online
Courses	6
Length	1.5 to 2 years
Cost	$6,200–$6,700

BECOME AN AUTOMATION EXPERT WITH A ROBOTICS AND EMBEDDED SYSTEMS CERTIFICATE

More and more sectors need robotics help, according to Global Affairs Canada, whether it's the aerospace, automotive, electronics, and defense and security industries, or healthcare. Industrial robotics, personal and service robots, and factory automation systems are becoming increasingly important to the economy as automation expands – and that means more career opportunities in this booming field.

This Certificate in Robotics and Embedded Systems can help you advance or change your career, providing an easy entry into the exciting robotics industry. Our robotics program offers hands-on projects, building and coding your own mobile robotic devices, and will give you the technical knowledge and skills to land robotics technician roles and other opportunities across a variety of sectors. Robotics courses and embedded systems courses cover areas like digital logic and hardware architecture, real-time embedded systems programming, and mobile robotic devices embedded systems. You can also explore emerging issues in robotics and embedded systems.

You'll be able to complete your robotics courses online, and schedule the certificate around your existing work and family responsibilities. Want to start growing your professional network? Collaborating with your fellow learners and instructors can help you start networking before you even graduate.

Pursue your passion for robotics with us. We're excited to help you build the career you've been dreaming of.

Meet Our Learners

This certificate has given me good insight into how software interacts with hardware; it has also enhanced the skills I already have, pushing them to new limits. Robotics is one of many new frontiers, so when potential employers ask me about my robotics experience during job interviews, I can share the knowledge I've acquired from the courses I've taken as part of The Chang School's Robotics and Embedded Systems certificate.
— Rey Malahay

Who should take this Robotics and Embedded Systems certificate?
- You're a professional with hands-on technical industry or computer programming experience and want to enter the consumer electronics, green technology product, robotics, automated machinery manufacturing, medical device, or telecommunications product field

What will you learn while taking the Robotics and Embedded Systems certificate?
You'll learn how to:
- Build mobile robotic devices and program embedded systems for product and automated device development
- Use microprocessor-based control systems, and perform systems-on-chip (SoC) design, and device software development
- Program mobile robotic devices
- Implement systems design in mobile robots and robotic devices
- Use tools like C, C++, and Python, plus customized robotics kits

ROBOTICS & EMBEDDED SYSTEMS

Certificate Requirements

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

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

Admission Criteria

Recommended:
- Mature student status with evidence of relevant college or university level coursework, or equivalent

OR
- Mature student status relevant industrial or professional experience in business

Required Courses

- ❑ CKRE 110   Digital Logic and Hardware Architecture
- ❑ CKRE 120   Programming Robotics Systems
- ❑ CKRE 130   Embedded Systems Hardware Architecture & Implementation
- ❑ CKRE 140   Real-Time Embedded Systems Programming
- ❑ CKRE 150   Emerging Issues in Robotics and Embedded Systems
- ❑ CSCI 130   Mobile Robotic Devices Embedded Systems

SOCIAL SCIENCES & HUMANITIES FOUNDATIONS

Certificate can be completed online.

Delivery	Online
Exam	In person
Courses	6
Length	1 year
Cost	$3,400–$3,900

EXPLORE THE WORLD OF SOCIAL SCIENCES AND HUMANITIES WITH A SOCIAL SCIENCES AND HUMANITIES FOUNDATIONS CERTIFICATE

Do you want to boost your critical thinking, problem-solving, research, and writing skills? The Chang School Certificate in Social Sciences and Humanities Foundations is a great way to improve your skill-set and stand out in a competitive job market.

Creative, analytical, and communication skills are in demand by many employers across a wide range of industries. This Social Sciences and Humanities certificate gives you knowledge and experience in a variety of subjects, making you a well-rounded candidate for any role you want to go after.Start off your certificate with courses in humanities and social sciences that provide in-depth training in critical thinking and academic writing and research. Then, you can curate your certificate with our courses in humanities. There are many expertise areas to choose from, taught by professionals with experience in the field. You can gain an education in literature, pop culture, and philosophy, or learn more about social change, and colonialism and independence.

If you're looking to bulk up your knowledge in the social sciences, you can explore the world of criminology and politics, or sociology and psychology. Or learn all about sustainability and the environment and accelerate your entry into that booming industry.

Our humanities and social sciences certificate can be completed online, so you can schedule your coursework around your commitments. Plus, it only takes a year to finish, so you can start your next career adventure quickly.

Are you ready to build those skills and make your resume shine?

Who should take this Social Sciences and Humanities Foundations certificate?
- You'd like to learn or improve your critical thinking, problem-solving, research, and writing skills
- You're interested in exploring degree-credit courses in social sciences and humanities before formally applying to university
- You're looking to strengthen your application to a full-time undergraduate degree program

What will you learn while taking the Social Sciences and Humanities Foundations certificate?
You'll learn how to:
- Develop and enhance your skills in critical thinking, problem-solving, research, writing, and presenting your ideas
- Explore specific areas that interest you that you may want to pursue academically or professionally

Certificate Requirements

- 2 required courses: CSSH 105 and CSSH 205
- 4 electives: 2 in Group A – Humanities and 2 in Group B – Social Sciences**
- Cumulative grade point average (GPA) of 1.67+

**Learners may select a course in Arabic (CARB), American Sign Language (CASL), Chinese (CCHN), French (CFRE), or Spanish (CSPN) as part of the Electives – Humanities category. However, an online placement test is required; visit the Department's website for details.

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

Admission Criteria

Recommended:
- Ontario Secondary School Diploma (OSSD) or equivalent
  - With 6 Grade 12 U or M credits
OR
- Mature student status

Note: If you do not meet the above stated admission criteria, you must complete as one of your four electives CENG 110.

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Financial Support

Awards and Bursaries
The Chang School offers both merit-based awards and need-based financial aid.

Ontario Student Assistance Program (OSAP)
This certificate program is OSAP-eligible. To learn more, visit the Student Financial Assistance website.

Questions?
Contact Client Services ce@torontomu.ca.

Required Courses

- ❑ CSSH 105   Critical Thinking
- ❑ CSSH 205   Academic Writing and Research

Electives – Group A: Humanities (select 2)

Students may select a course in Arabic (CARB), American Sign Language (CASL), Chinese (CCHN), French (CFRE), or Spanish (CSPN) as part of this category. However, an online placement test is required; visit the Department's website for details.

- ❑ CACS 100   Ideas That Shape the World I
- ❑ CACS 210   Ideas: Antiquity
- ❑ CENG 110   Literatures Across Borders
- ❑ CENG 208   Introduction to Non-Fiction
- ❑ CHIS 104   Ten Days That Shook The World
- ❑ CHIS 105   Inventing Popular Culture
- ❑ CHIS 106   Technology, Warfare and Social Change
- ❑ CHIS 107   Colonization, Colonialism and Independence
- ❑ CPHL 101   Plato and the Roots of Western Philosophy
- ❑ CPHL 201   Problems in Philosophy
- ❑ CPHL 333   Philosophy of Human Nature
- ❑ CPHL 366   Existentialism and Art and Culture

Electives – Group B: Social Sciences (select 2)

- ❑ CCRM 100   Introduction to Canadian Criminal Justice
- ❑ CCRM 102   Introduction to Criminology
- ❑ CECN 104   Introductory Microeconomics
- ❑ CECN 204   Introductory Macroeconomics
- ❑ CEUS 102   Environment and Sustainability
- ❑ CEUS 202   Sustaining the City's Environments
- ❑ CGEO 131   Energy, Earth and Ecosystems
- ❑ CGEO 151   Location, Location, Location
- ❑ CPOG 100   People, Power and Politics
- ❑ CPOG 110   Power and Influence in Canadian Politics
- ❑ CPPA 101   Cdn Public Administration I: Institutions
- ❑ CPPA 102   Cdn Public Administration II: Processes
- ❑ CPSY 102   Introduction to Psychology I
- ❑ CPSY 202   Introduction to Psychology II
- ❑ CSOC 105   Introduction to Sociology
- ❑ CSOC 107   Sociology of the Everyday
- ❑ CSSH 100   Inquiry and Problem-Solving
- ❑ CSSH 102   Learning and Development Strategies
- ❑ CSSH 301   Research Design and Qualitative Methods

SPECIALIZATION IN FILM STUDIES

THIS CERTIFICATE OFFERS SPECIALIZATIONS IN EITHER FILM STUDIES OR PHOTOGRAPHY STUDIES. COMPLETE THE FOLLOWING COURSES TO ACHIEVE THE SPECIALIZATION IN FILM STUDIES.

Required Courses

❑ CDMP 129   Motion Picture Production I
❑ CMPF 107   Intro to Cinematography
❑ CMPF 290   Introduction to Film Studies

Specialization in Photography Studies

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

❑ CDFP 328   Photography Production I
❑ CDFP 329   Photography Production II
❑ CDFP 333   Photography and Digital Imaging
❑ CDFP 358   Photography and the Screen

STRATEGIC MARKETING MANAGEMENT

Includes online and in-person courses.

Delivery	Hybrid
Courses	6
Length	1 to 2 years
Cost	$3,600–$3,900

BEGIN YOUR METEORIC RISE IN THE MARKETING INDUSTRY WITH A STRATEGIC MARKETING MANAGEMENT CERTIFICATE

The marketing industry is changing – fast. And marketing pros need the skills and savvy to keep up with an ever-evolving marketing landscape. The Chang School Certificate in Strategic Marketing Management was designed to provide future marketing pros with everything they need to know to stay on the cutting edge of strategic marketing best practice. We track and teach the trends in corporate social responsibility, social marketing, and sustainability so you can succeed in your next marketing role.

This marketing certificate is all about hands-on, practical learning. Our marketing courses are taught by marketing industry professionals, with our instructors providing amazing insights into current marketing challenges faced by Canadian companies. You build your foundational marketing skills first, mastering the marketing basics and marketing metrics and analysis. Then, you can customize your schedule to your liking, picking courses on marketing in fascinating specialties like international marketing and sports marketing, or effective persuasion.Want to hone your marketing tech skills? Our digital marketing courses will train you in the concepts of e-business, innovations in marketing, business intelligence marketing, content marketing management, and competitive intelligence. Certain course combos can even score you a professional development award, too.

If you want to accelerate your marketing career, you can complete the certificate in as little as a year. Online marketing courses allow for plenty of flexibility, while on-campus courses and group projects offer the opportunity to engage and network with your fellow learners and instructors face-to-face. Best of all? You can apply all your learnings from our certificate in marketing immediately in the workplace, whether you're going after your first role or looking to advance your marketing career.

Companies need marketing professionals to promote their products and make them look good. Are you ready to start creating great campaigns together?
Who should take this Strategic Marketing Management certificate?
- You're a marketing professional seeking career advancement by gaining expertise in a specific area and upgrading data analytic skills
- You're a working professional who wants to make a career change and enter the marketing industry
- You're a new graduate who'd like to complement your degree or diploma with marketing skills to give you a competitive edge

What will you learn while taking the Strategic Marketing Management certificate?
You'll learn how to:
- Understand the fundamentals of marketing, including theories, principles, and concepts of market behaviour
- Interpret and satisfy customer expectations by creating, developing, managing, and delivering products and services
- Apply quantitative and qualitative analyses to measure the success of marketing initiatives
- Engage state-of-the-art contemporary supply and demand marketing metrics and analytic tools, such as marketing research, share of mind, margins and profits, product, Salesforce, and channel management
- Use the case method – integrating marketing theory and marketing metrics – as a model for critically analyzing situations and developing evidence-based, ethical decision-making skills
- Create and evaluate integrated marketing plans that may include product and brand management, marketing research, advertising, public relations, media buying, and digital marketing

Note: Course offerings for our Certificate in Strategic Marketing Management are currently limited. Want to get started with this certificate? Contact The Chang School's Client Services team at ce@torontomu.ca for more information before registering.

Interested in other certificates at The Chang School? Learn more about our wide range of programs and find the right fit for you.

STRATEGIC MARKETING MANAGEMENT

Certificate Requirements

- 2 required courses**
  - CMKT 100
  - CMKT 300
- Any 4 electives
- Cumulative grade point average (GPA) of 1.67+

**If you demonstrate the requisite combination of education and work experience, you may apply to the academic coordinator to waive CMKT 100. If granted a waiver, you will need to complete 5 electives (instead of 4) to fulfill the certificate requirements.

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

Admission Criteria

Required:
- Ontario Secondary School Diploma (OSSD) or equivalent
  - With 6 Grade 12 U or M credits
OR
- Mature student status with relevant professional experience in business

If you're an undergraduate student, you should be aware of possible certificate restrictions. For complete details, check Curriculum Advising.

Financial Support

Awards and Bursaries
The Chang School offers both merit-based awards and need-based financial aid.

Ontario Student Assistance Program (OSAP)
This certificate program is OSAP-eligible. To learn more, visit the Student Financial Assistance website.

Questions?
Contact Client Services ce@torontomu.ca

Required Courses

- ☐ CMKT 100   Principles of Marketing
- ☐ CMKT 300   Marketing Metrics and Analysis

Electives (select 4 or 5)

- ☐ CGMS 522   International Marketing
- ☐ CITM 350   Concepts of e-Business
- ☐ CMKT 400   Understanding Consumers
- ☐ CMKT 500   Marketing Research
- ☐ CMKT 504   Effective Persuasion
- ☐ CMKT 510   Strategic Brand Management
- ☐ CMKT 535   Integrated Marketing Communications
- ☐ CMKT 600   Integrated Case Analysis
- ☐ CMKT 700   Marketing Analytics and Decision-Making
- ☐ CMKT 702   Advanced Marketing Management
- ☐ CMKT 723   Services Marketing
- ☐ CMKT 730   Assessing/Managing Market Opportunities
- ☐ CMKT 731   Competitive Intelligence
- ☐ CMKT 828   Sport Marketing Concepts and Strategy
- ☐ CMKT 829   International Sport Marketing
- ☐ CMKT 850   Applied Research Project

URBAN AGRICULTURE

Certificate can be completed online.

Delivery	Online
Courses	4
Length	6 months to 1 year
Cost	$2,600–$3,000

GROW GREENER CITIES WITH AN URBAN AGRICULTURE CERTIFICATE

With the world quickly becoming more urbanized, there is an urgent need to strengthen city and regional food systems. Urban agriculture is becoming more and more popular across Canada, helping communities create sustainable cities. This Certificate in Urban Agriculture from The Chang School will help you excel in this growing field and help our cities become more resilient for years to come.

This agriculture certificate is designed to meet the requirement for professional accreditation and expertise in urban food production systems and development of green urban infrastructure. Created in partnership with the TMU Centre for Studies in Food Security, coursework covers urban agriculture fundamentals, best practices, and policy-making. It also provides training in green and natural infrastructure.According to the Canadian Federation of Agriculture, experts predict 123,000 job vacancies in Canada's agriculture sector by 2029, so qualified urban agriculture specialists are in demand. There are many urban agriculture job opportunities, no matter what area you want to focus on. You can work in diverse sectors like urban planning, environmental studies, public health, international development, urban farming and more.

You can also complete your agriculture courses online, allowing you to finish your certificate on a schedule that works for you and your life. We want to set you up for success and gain meaningful employment as soon as possible, so the certificate has a practicum and project component that allows students to gain hands-on experience in urban agriculture, thanks to partnerships with both non-profit and entrepreneurial urban farms across Canada.

Are you ready to join the fight against climate change and help green our urban environments? Begin this urban agriculture certificate today and enjoy making a difference.

Who should take this Urban Agriculture certificate?
- You're a business entrepreneur, ecological professional, urban or health planner, municipal planner, environmental advocate, development officer, urban food grower, or park staff or other urban agriculture worker and want additional training or expanded understanding of the overall scope of the field
- You're a recent graduate with a related degree in nutrition and food, urban planning, sociology, or architecture and want to gain more specialization in urban agriculture

What will you learn while taking the Urban Agriculture certificate?
You'll learn how to:
- Analyze the relationships between urban agriculture and multiple dimensions of urban management, including health and nutrition, social and cultural development, local economic development, and environmental management
- Plan for the development of green, natural infrastructure as part of the built urban environment
- Identify how urban agriculture can advance food security, food sovereignty, and environmental sustainability through planning and policy
- Apply participatory and gender-sensitive concepts, tools, and processes, such as situation analysis, action planning, and policy design with diverse urban agriculture stakeholders
- Apply urban agriculture in healthcare settings addressing mental health
- Apply urban agriculture to address social behaviour challenges, especially those related to you

Certificate Requirements

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

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

Admission Criteria

Recommended:
- OSSD with six Grade 12 U or M credits (including English), with a minimum average of 60 percent, or equivalent

OR
- mature student status with relevant work experience

Financial Support

The Chang School offers both merit-based awards and need-based financial aid. This certificate is not eligible for the Ontario Student Assistance Program (OSAP).

Questions?
Contact Client Services ce@torontomu.ca

Required Course

- ❑ CVFN 410 Understanding Urban Agriculture

Elective (select 3)

- ❑ CVFN 400 Practicum/Project in Urban Agriculture
- ❑ CVFN 411 Dimensions of Urban Agriculture
- ❑ CVFN 412 Practicing Urban Agriculture
- ❑ CVFN 413 Urban Agriculture Policy-Making
- ❑ CVFN 420 Green/Natural Infrastructure