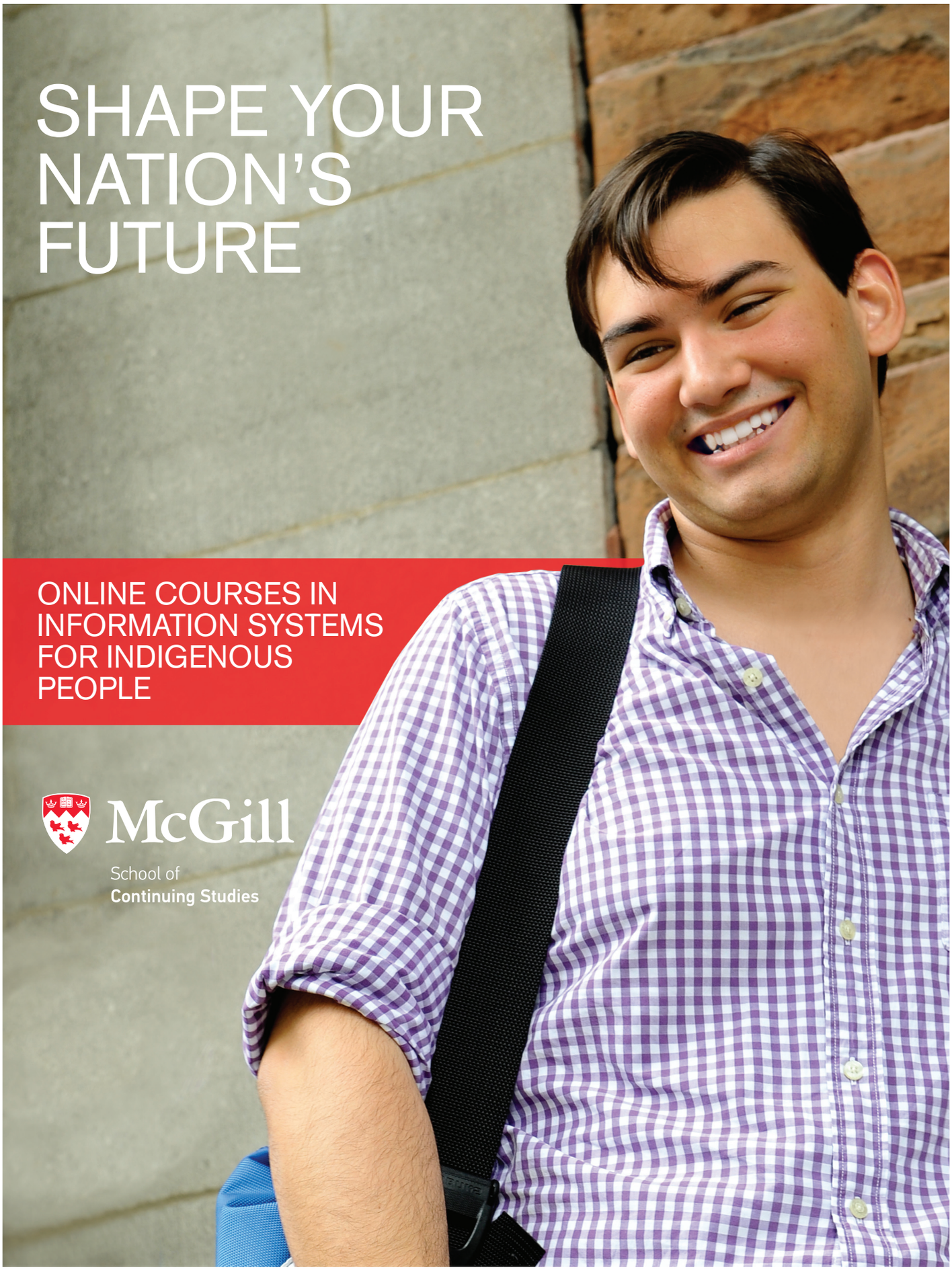
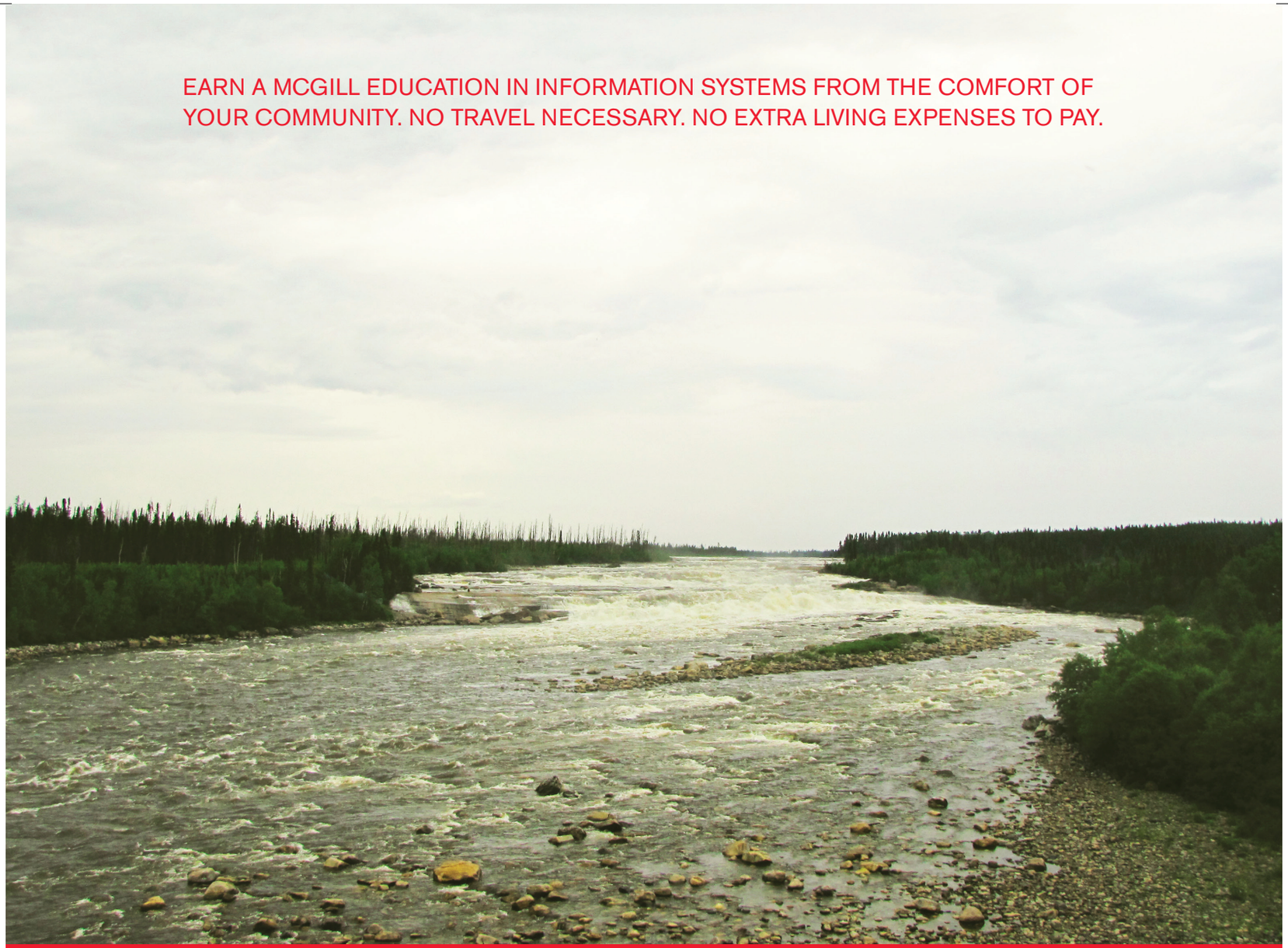

SHAPE YOUR NATION'S FUTURE
ONLINE COURSES IN INFORMATION SYSTEMS FOR INDIGENOUS PEOPLE
McGill
School of
Continuing Studies

EARN A MCGILL EDUCATION IN INFORMATION SYSTEMS FROM THE COMFORT OF YOUR COMMUNITY. NO TRAVEL NECESSARY. NO EXTRA LIVING EXPENSES TO PAY.



McGill comes to you – online, on site, and at times that fit your schedule. The courses in Information Systems for Indigenous People offer integrated and comprehensive learning at a pace that is adapted to the realities of daily life. You will learn about the basics of information systems and data processing technology, focusing on skills that are in high demand across Northern Quebec.

A FEW WORDS FROM THE ASSOCIATE DEAN

We proudly continue our tradition of high-quality, accessible, innovative, market-responsive education. We're committed to delivering rich academic and practical professional development programs that will help you to gain momentum in your career.

I invite you to discover the McGill experience.

Dr. Carmen Sicilia
Associate Dean, Academic
McGill University School of Continuing Studies

LEARN NEW SKILLS IN INFORMATION SYSTEMS

The goal of the online courses in **Information Systems** for Indigenous People is to enrich the lives of First Nations, Inuit and Métis people and their communities. With this education, you can help shape your Nation's future.

Information technology is one of the backbones of development in Northern Quebec. Organizations across the region are seeking individuals with the skills and knowledge to support information systems used in all sectors of the community. You will learn about establishing, operating and maintaining computer systems, networks and websites as well as managing application development.

NOT LOST IN TRANSLATION

Course content will be tailored specifically to the needs of Northern First Nations' communities.

Such as:

- Guest lecturers from the North.
- Instructors work closely with your community to develop course materials.
- Case studies and business practices from local mining or resource industries, banks and other institutions – from both Northern and Southern Canada.
- At the beginning of each course, students will receive a vocabulary of English Information Systems terms, translated into their language and cultural context.

TEACHING AND LEARNING APPROACH

Our teaching and learning philosophy is to take a learner-centred approach.

- We believe that learning occurs when participants get opportunities to experience learning through the four phases of the learning cycle:
  - > apply the concepts learned in your class to your work environment
  - > reflection on and analysis of experience
  - > constructing one's own conclusions about the links between concepts and application
  - > planning for effective actions in similar situations
- We focus on competency development.
- Education is only useful and beneficial to the individual and the organization, if it translates into change and observable behaviours.
- We make the theory relevant to the context by engaging the learner in relating them to their own experience and personal context.

SUPPORT

Local support for these courses come from McGill University and your community.

- A **LOCAL NORTHERN COORDINATOR** will work closely with McGill University to oversee course administration. The local Coordinator will collect your application forms, registration forms, and supporting documents to send to McGill.
- An **ELDER** from your community will be invited to ask for blessings and provide spiritual support at the beginning of the courses.
- **TECHNICAL SUPPORT** is available for both students and instructors during classes.
- A **TUTOR** is available to help students with any course content that they may find difficult.
- **FIRST PEOPLES' HOUSE** at McGill University supports Indigenous students who attend the university–wherever they are offered. An Aboriginal Community Outreach Coordinator can help you find the academic support and resources that you need to succeed.
- **A DEDICATED ADVISOR** at the School of Continuing Studies meet with students online to discuss all aspects of their education.

FUNDING

Band Councils, local economic development offices, and Indigenous Nations and governments will provide local resources, such as computers and classrooms, for your use.

Talk to your local Band Council or Nation government about access to educational subsidies, repayable loans and other financial support for educational programs.

GRADUATION

When all courses are successfully completed, the time to celebrate arrives!

- An official McGill University transcript following the completion of each course.
- You are invited to attend the University's convocation ceremony in Montreal.
- First Peoples' House hosts a convocation dinner for First Nations, Inuit and Métis graduates, where you can share your success with family, friends, your extended family at the School of Continuing Studies and people at McGill University involved in your education (see photo above).
- Graduating students receive a gift of a specially designed scarf in recognition of their achievement.

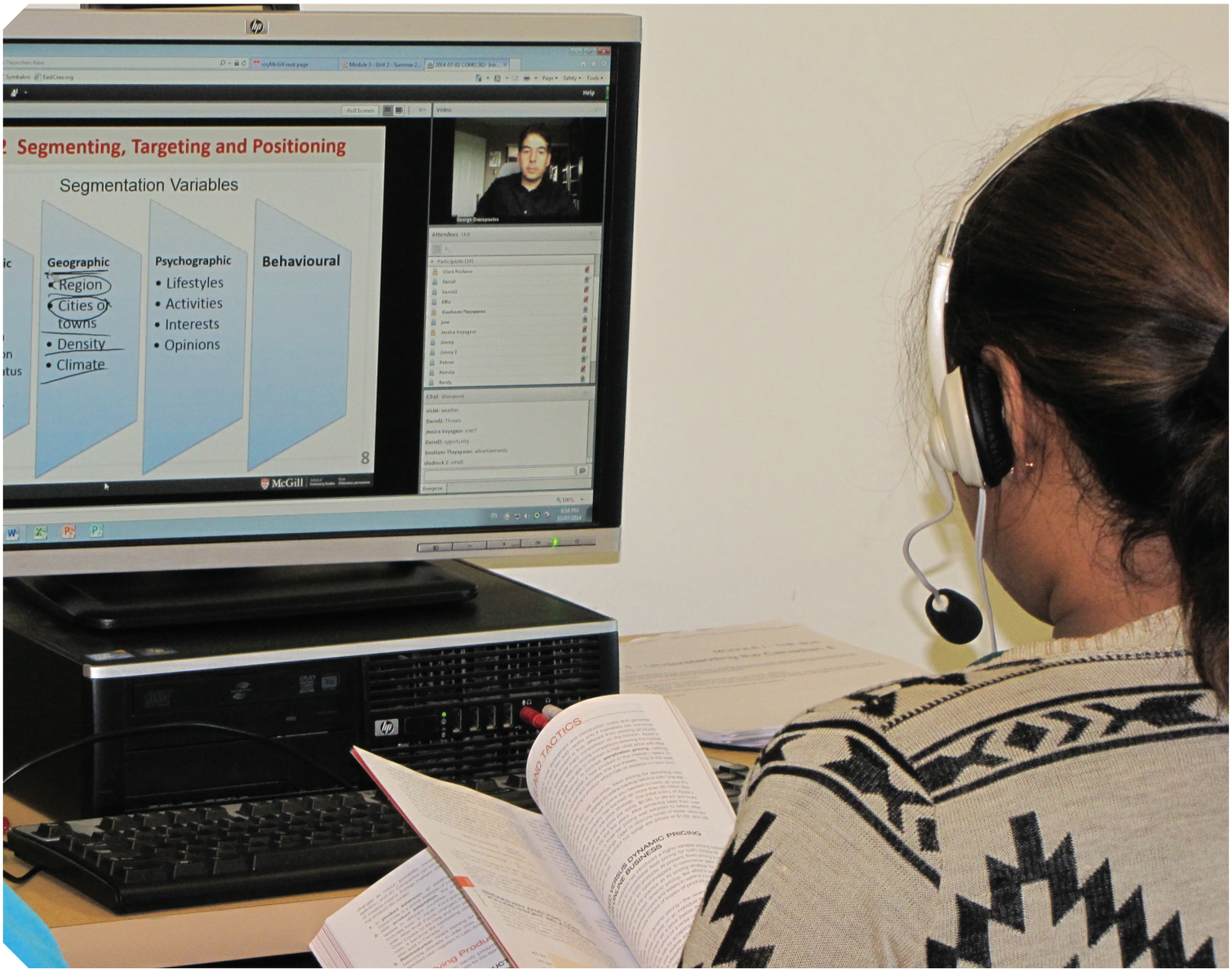
COURSE DELIVERY

- Online courses in Information Systems are offered in the evenings (6 p.m.–9 p.m.).
- During fall, winter, early spring and late summer, classes meet once a week at a local community setting for 13 weeks.
- Students log in to see, hear and interact with instructors – who can see and hear them – face-to-face.
- Ask questions or share discussions online and with your classmates!
- Online courses in Information Systems are available for groups of up to 35 people.

ABOUT THE COURSES IN INFORMATION SYSTEMS

The courses in Information Systems for Indigenous People offer 30 credits of 10 interactive, online, undergraduate-level courses. Each 3 credit course is divided into modules, delivered consecutively and specifically designed to ease demands on your schedule.

These courses will provide you with a foundation in the concepts and techniques required for effective planning, design, and development of software applications and systems, applied computer knowledge in networking, and internet technologies. It will provide you with the knowledge to assume entry-level positions in the field of information technology, technical support, internet and web specialism, computer support consulting and help desk analysis.



COURSE DESCRIPTIONS

CCCS 280 Introduction to Computer Information Systems*

An introduction to understanding the role of computer information systems in modern society, work practices, reshaping organizations, and transforming cultures. Topics include: current trends in information systems, decision support systems, social media, business process improvements and competitive advantage, database technology, e-business and the digital economy, knowledge management, telecommunications and networking.

CCCS 300 Programming Techniques 1
Pre-requisite: CCCS 280 Introduction to Computer Information Systems

Fundamental programming techniques, concepts, and data structures, including modularization and maintainability. Emphasis on facilitating communication and understanding between systems analysts and programmers to support decision-making.

CCCS 315 Data Structures and Algorithms
Pre-requisite: CCCS 300 Programming Techniques 1

Programming techniques used to implement algorithms on computers with an object oriented programming language through the careful design of data structures which support the efficient manipulation of data.

CCCS 321 Operating Systems Administration
Pre-requisite: CCCS 280 Introduction to Computer Information Systems

Operating systems such as Windows, LINUX and UNIX environments, administration of computer servers, use of script languages in various operating systems, back-up procedures and remote access, communication protocol used among different systems, managing information, and system security.

CCCS 325 Mobile Application Development
Pre-requisite: CCCS 300 Programming Techniques 1

Examines the limitations and technical challenges of current mobile devices and wireless communication by using up-to-date software development tools and application programming interfaces. Develop small realistic applications for mobile devices by using a standard software development environment.

CCCS 330 Database Design and Business App Development
Pre-requisite: CCCS 300 Programming Techniques 1

Design and implement applications that make use of different database management systems. Simple and complex Structured Query Language (SQL) used in manipulation of information, data design, querying, and programming. Connectivity to different databases through programming languages to implement web applications.

CCCS 431 Networking Fundamentals
Pre-requisite: CCCS 321 Operating Systems Administration

Fundamental concepts and practices of network principles, technical and managerial aspects of data communications, overview of local area and wide area networks, network topology, network protocols, internet/intranet, client/server communication and file sharing.

CMIS 422 Information Systems Security
Pre-requisite: CCCS 280 Introduction to Computer Information Systems

Fundamental concepts relating to the design of secure information systems, identification and assessment of security risks at the application, network and physical levels. Use of cryptography and other techniques to provide necessary level of security.

CCCS 310 Web Development
Pre-requisite: CCCS 300 Programming Techniques 1

Development of web sites and web-based application using page markup, style sheets and client-side scripting. Emphasis will be placed on developing pages that support current standards and accessibility requirements, as well as multimedia, cross-platform development and site deployment.

CCCS 425 Web Services
Pre-requisite: CCCS 300 Programming Techniques 1

Design, implementation and deployment of web services-based solutions to solve common problems in the distributed application domain.

*This course is subject to the approval of the University.

2015-2016 SCHEDULE

COURSE NUMBER AND TITLE	SEMESTER	START DATE
CCCS 280 Introduction to Computer Information Systems	Fall 2015	September 16, 2015
CCCS 300 Programming Techniques 1	Winter 2016	January 6, 2016
CCCS 315 Data Structures and Algorithms	Winter 2016	March 9, 2016

ADMISSION REQUIREMENTS

The courses are aimed at First Nations, Inuits and Métis people where:

- Applicants must hold a CEGEP diploma (DCS, DEC or equivalent) **OR**
- Applicants 21 years of age and older may be admitted as mature participants

WHAT DOCUMENTS DO I SEND?

McGill School of Continuing Studies will provide the following forms for you to complete and send:

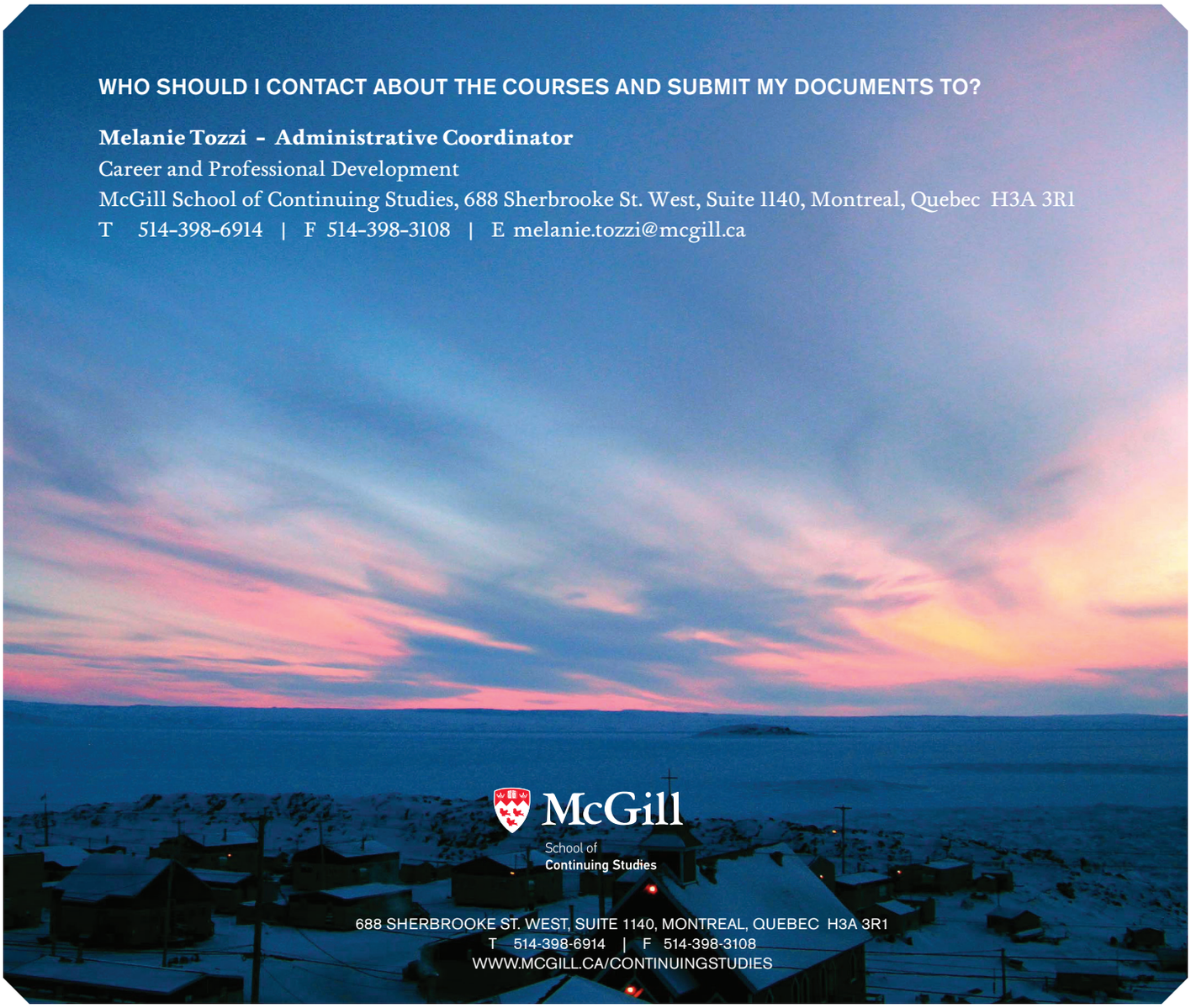
- Your application form* (to be completed once)
- Your permanent code data form* (to be completed once)
- Your registration form* (to be completed every time you register into a course)

Please also submit:

- A one-page letter of intent
- **Two** pieces of valid ID:

  1) A copy of your **Quebec Birth Certificate**
  2) A copy of your **Indian Status Card** (front and back) AND a **Band letter/Chief Solemn Declaration letter**
  3) A copy of your Driving License (front and back) OR Quebec Medicare (RAMQ) card (front and back)

*The Coordinator will assist participants in completing the documents.



WHO SHOULD I CONTACT ABOUT THE COURSES AND SUBMIT MY DOCUMENTS TO?

Melanie Tozzi - Administrative Coordinator
Career and Professional Development
McGill School of Continuing Studies, 688 Sherbrooke St. West, Suite 1140, Montreal, Quebec H3A 3R1
T 514-398-6914 | F 514-398-3108 | E melanie.tozzi@mcgill.ca

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