



501st REPORT OF THE ACADEMIC POLICY COMMITTEE TO SENATE on the APC meeting held on November 12th, 2020

I. TO BE APPROVED BY SENATE

(A) NEW TEACHING PROGRAMS REQUIRING SENATE APPROVAL

School of Continuing Studies

M.Sc.(Applied) in Multilingual Digital Communication; Non-Thesis (45 cr.) – *appendix A*

At a meeting on November 12th, 2020, APC reviewed and approved a proposal from the School of Continuing Studies to create a new M.Sc.(Applied) in Multilingual Digital Communication; Non-Thesis (45 cr.). This new program, fully delivered online, aims at responding to a strong demand for T-shaped communication professionals with a broad knowledge base enabling them to collaborate across disciplines and deep skills in specific areas of specializations. As a new degree program, this proposal will be submitted to the BCI and MES to gain external approval.

Be it resolved that Senate approve the creation of the proposed M.Sc.(Applied) in Multilingual Digital Communication; Non-Thesis (45 cr.).

(B) ACADEMIC PERFORMANCE ISSUES / POLICIES / GOVERNANCE/AWARDS – *none*

(C) CREATION OF NEW UNITS / NAME CHANGES / REPORTING CHANGES - *none*

(D) CHANGES IN DEGREE DESIGNATION – *none*

(E) INTER-UNIVERSITY PARTNERSHIPS – *none*

(F) OTHER - *none*

II. TO BE ENDORSED BY SENATE / PRESENTED TO SENATE FOR DISCUSSION – *none*

III. APPROVED BY APC IN THE NAME OF SENATE

(A) DEFINITIONS – *none*

(B) STUDENT EXCHANGE PARTNERSHIPS / CONTRACTS / INTERUNIVERSITY PARTNERSHIPS - *none*

(C) OTHER – *none*

IV. FOR THE INFORMATION OF SENATE

A) ACADEMIC UNIT REVIEWS - *none*

B) APPROVAL OF COURSES AND TEACHING PROGRAMS

1. Programs

- a) APC Approvals (new options/concentrations and major revisions to existing programs)**
 - i. New Programs - *none*
 - ii. Major Revisions of Existing Programs - *none*
- b) APC Subcommittee on Courses and Teaching Programs (SCTP) Approvals**
(Summary Reports: <http://www.mcgill.ca/sctp/documents/>)
 - i. Moderate and Minor Program Revisions
Approved by SCTP on October 22nd, 2020 and reported to APC on November 12th, 2020
School of Continuing Studies
Professional Development Certificate in Full Stack JavaScript Development (54 CEUs)

Faculty of Science
B.Sc.; Honours in Biology (71-72 cr.)
 - ii. Program Retirements
Approved by SCTP on October 22nd, 2020 and reported to APC on November 12th, 2020
School of Continuing Studies
Professional Development Certificate in Full Stack Web Development (12 CEUs)

2. Courses

- a) New Courses**
Reported as having been approved by SCTP on October 22nd, 2020: 32
School of Continuing Studies: 29
Faculty of Dentistry: 1
Faculty of Science: 2
- b) Course Revisions**
Reported as having been approved by SCTP on October 22nd, 2020: 4
School of Continuing Studies: 4
- c) Course Retirements**
Reported as having been approved by SCTP on October 22nd, 2020: 2
School of Continuing Studies: 2



McGill

New Program/Concentration Proposal Form

(2019)

<p>1.0 Degree Title Please specify the two degrees for concurrent degree programs</p> <p>Master of Science(Applied)</p>	<p>2.0 Administering Faculty or GPS</p> <p>GPS</p>
<p>1.1 Major (Subject/Discipline) (30-char. max.)</p> <p>Multilingual Digital Communication</p>	<p>Offering Faculty & Department</p> <p>School of Continuing Studies / Translation Studies</p>
<p>1.2 Concentration (Option) (30 char. max.)</p> <p></p>	<p>3.0 Effective Term of Implementation (Ex. Sept. 2019 or 201909) Term</p> <p>202109</p>
<p>1.3 Complete Program Title (info from boxes 1.0+1.1+1.2+5.2)</p> <p>Master of Science(Applied) in Multilingual Digital Communication; Non-Thesis</p>	

4.0 Rationale and Admission Requirements for New Program/Concentration

(see attachment)

5.0 Program Information
Indicate an "x" as appropriate

<p>5.1 Program Type</p> <p>Bachelor's Program</p> <p>Master's</p> <p>X M.Sc.(Applied) Program</p> <p>Dual Degree/Concurrent Program</p> <p>Certificate</p> <p>Diploma</p> <p>Graduate Certificate</p> <p>Graduate Diploma</p> <p>Professional Development Cert</p> <p>Ph.D. Program</p> <p>Doctorate Program (Other than Ph.D.)</p> <p>Self-Funded/Private Program</p> <p>Off-Campus Program</p> <p>X Distance Education Program</p> <p>Other (Please specify)</p>	<p>5.2 Category</p> <p>Faculty Program (FP)</p> <p>Major</p> <p>Joint Major</p> <p>Major Concentration (CON)</p> <p>Minor</p> <p>Minor Concentration (CON)</p> <p>Honours (HON)</p> <p>Joint Honours Component (HC)</p> <p>Internship/Co-op</p> <p>Thesis (T)</p> <p>X Non-Thesis (N)</p> <p>Other</p> <p>Please specify</p> <p></p>	<p>5.3 Level</p> <p>Undergraduate</p> <p>Dentistry/Law/Medicine</p> <p>Continuing Studies (Non-Credit)</p> <p>Collegial</p> <p>X Masters & Grad Dips & Certs</p> <p>Doctorate</p> <p>Post-Graduate Medicine/Dentistry</p> <p>Graduate Qualifying</p> <p>5.4 Requires Centrally-Funded Resources</p> <p>Yes <u> X </u> No <u> </u></p>
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<p>6.0 Total Credits or CEUs (if latter, indicate "CEUs" in box)</p> <p>45 credits</p>	<p>7.0 Consultation with Related Units X Yes No</p> <p>Financial Consult X Yes No</p> <p>Attach list of consultations.</p>
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8.0 Program Description (Maximum 150 words)

The M.Sc.(Applied) in Multilingual Digital Communication; Non-Thesis is an online 45-credit professional, transdisciplinary and cross-industry program that focuses on transversal competencies in translation, research, project management, copywriting and multilingualism management. Two streams are available, which relate to localized global communication and multilingual communication technologies.

9.0 List of proposed new Program/Concentration

If new concentration (option) of existing program, a program layout (list of all courses) of existing program **must** be attached.

Proposed program (list courses as follows: Subj Code/Crse Num, Title, Credit Weight under the headings of: Required Courses, Complementary Courses, Elective Courses)

M.Sc.(Applied) in Multilingual Digital Communication; Non-Thesis (45 credits)

Required Courses (26 credits)

CMDC 616 Research Methods in Professional Communication (3 credits)
CMDC 618 Language Technologies (3 credits)
CMDC 620 Project Management for Global Content (3 credits)
CMDC 630 Multilingual Desktop Publishing (3 credits)
CMDC 650 Multilingual Content Management in Enterprise Solutions (2 credits)

Capstone Experience

12 credits from either practicum, internship or project courses from the following:

Practicum

CMDC 694 Practicum 1 (6 credits)
CMDC 695 Practicum 2 (6 credits)

Internship

CMDC 696 Internship 1 (6 credits)
CMDC 697 Internship 2 (6 credits)

Project

CMDC 698 Applied Research Project 1 (6 credits)
CMDC 699 Applied Research Project 2 (6 credits)

Complementary Courses (19 credits)

6 credits to be chosen from the following:

CMDC 610 Approaches to Multilingualism Management (3 credits)
CMDC 612 Copywriting (3 credits)
CMDC 614 Digital Translation Methodology (3 credits)

13 credits to be chosen from Stream 1 or Stream 2

STREAM 1: Localized Global Communication (LGC)


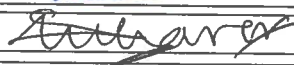
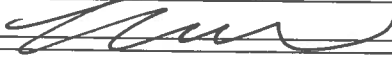
CMDC 622 Current Trends in Digital Communication (2 credits)
CMDC 642 Social Media and Community Management in Multilingual Contexts (3 credits)
CMDC 644 Multilingual Search Engine Optimization and Web Analytics (3 credits)
CMDC 646 Global Digital Communication and Localization Strategies (3 credits)
CMDC 652 Transcreation Lab (2 credits)

STREAM 2: Multilingual Communication Technologies (MCT)

CMDC 623 Artificial Intelligence in Multilingual Communication (3 credits)
CMDC 643 Technical Writing (2 credits)
CMDC 645 Advanced Language Technology: Evaluation and Implementation (3 credits)
CMDC 647 Machine Translation and Post-Editing (3 credits)
CMDC 653 Data Structure for Language Professionals (2 credits)

10.0 Approvals

Routing Sequence

	Name	Signature	Meeting Date
Department	María Sierra CÓRDOBA SERRANO		Oct. 15, 2019
Curric/Acad Committee	Sue LAVER		Oct. 15, 2019
Faculty 1	Carola WEIL		Oct. 15, 2019
Faculty 2			
Faculty 3			
CGPS		CGPS Approval	March 9, 2020
SCTP		Cindy Smith, Secretary to SCTP	May 7, 2020
APC			
Senate			

Submitted by

Name

María Sierra Córdoba Serrano

To be completed by ES:

Phone

Ext 6823

CIP Code

Email

maria.cordobaserrano@mcoill.ca

Submission Date

REMINDERS:

*Box 5.4 – Must be completed; see section 6.5.4 within the New Program Guidelines at:
<https://www.mcgill.ca/sctp/guidelines>.

**All new program proposals must be accompanied by a support document.

Consultations: List of people consulted for the M.Sc. (Applied) in Multilingual Digital Communication

Faculty of Arts

Antonia Maioni (Dean)
Michael Fronda (Associate Dean)

Département des littératures de langue française, de traduction et de création

Dr. Michel Biron (Interim Chair)
Audrey Coussy
Jane Everett, Prof.

Art History & Communications Studies

Mary Hunter

Languages, Literatures and Cultures

Eugenio Bolongaro

Linguistics

Luis Alonso Ovalle

Information Studies

Kimiz Dalkir

Faculty of Management

Isabelle Bajeux-Besnainou
Morty Yalovsky
Liette Lapointe

Faculty of Science Computer Sciences

Bettina Kemme
Jackie Chi Kit Cheung (Computational Linguistics/Natural Language Processing)

Faculty of Engineering

Jim Nicell
Elect. Comput. Engineering, Chair

Not required but also consulted:

Marilyn Scott, Prof.
Anja Geitmann, Dr.
C. Colleen Cook, Dr.
Laura Winer, Dr.

APPENDIX 1

CONSULTATION REPORT FORM RE PROGRAM PROPOSALS

DATE: 9 décembre 2019

TO: Curriculum committee

FROM: Département des littératures de langue française, de traduction et de création

The attached proposal has been submitted to the Curriculum Committee, and it has been decided that your department should be consulted.

Program Title: Master of Science (Applied) in Multilingual Digital Communication; Non-Thesis

Would you be good enough to review this proposal and let me know as soon as possible, on this form, whether or not your department has any objections to, or comments regarding, the proposal. Specifically, a course [or courses] taught by your department that has [have] been included in the program's list of courses.

 X NO OBJECTIONS SOME OBJECTIONS

COMMENTS: After consulting with colleagues in translation studies, we do not have any kind of objections.

Signature: 

Date: 9 décembre 2019

APPENDIX 1

CONSULTATION REPORT FORM RE PROGRAM PROPOSALS

DATE: December 8, 2019

TO: Dr. María Sierra Cordoba Serrano, School of Continuing Studies

FROM: Eugenio Bolongar, Chair, Languages, Literatures, and Cultures

The attached proposal has been submitted to the Curriculum Committee, and it has been decided that your department should be consulted.

Program Title: Master of Science (Applied) in Multilingual Digital Communication; Non-Thesis

Would you be good enough to review this proposal and let me know as soon as possible, on this form, whether or not your department has any objections to, or comments regarding, the proposal. Specifically, a course [or courses] taught by your department that has [have] been included in the program's list of courses.

 X NO OBJECTIONS SOME OBJECTIONS

COMMENTS:



Signature: _____

Date: December 8, 2019

APPENDIX 1**CONSULTATION REPORT FORM
RE PROGRAM PROPOSALS****DATE:** November 18, 2019**TO:** Carola Weil
Dean, School of Continuing Studies**FROM:** Kimiz Dalkir
Director, School of Information Studies

The attached proposal has been submitted to the Curriculum Committee, and it has been decided that your department should be consulted.

Program Title: Master of Science (Applied) in Multilingual Digital Communication; Non-Thesis

Would you be good enough to review this proposal and let me know as soon as possible, on this form, whether or not your department has any objections to, or comments regarding, the proposal. Specifically, a course [or courses] taught by your department that has [have] been included in the program's list of courses.

 X NO OBJECTIONS SOME OBJECTIONS

COMMENTS:**Signature:****Date:**

November 18, 2019

APPENDIX 1**CONSULTATION REPORT FORM
RE PROGRAM PROPOSALS****DATE:** December 10, 2019**TO:** Carola Weil, PhD, Dean, School of Continuing Studies**FROM:** Jim Nicell, PhD, Dean, Faculty of Engineering

The attached proposal has been submitted to the Curriculum Committee, and it has been decided that your department should be consulted.

Program Title: Master of Science (Applied) in Multilingual Digital Communication; Non-Thesis

Would you be good enough to review this proposal and let me know as soon as possible, on this form, whether or not your department has any objections to, or comments regarding, the proposal. Specifically, a course [or courses] taught by your department that has [have] been included in the program's list of courses.

_____ **NO OBJECTIONS** X **SOME OBJECTIONS**

COMMENTS:

The Faculty of Engineering has no objections to the proposed Master of Science (Applied) in Multilingual Digital Communication (Non-Thesis), which appears to be an interesting proposal that satisfies an existing societal need to professional in certain fields. However, members of the Faculty of Engineering Academic Committee have expressed some concerns about the degree name – specifically, the offering of a Masters degree in Science (Applied) in the School of Continuing Studies, especially if much, if not most, of the target audience, as described in the proposal, would be people who are unlikely to hold a Bachelor's degree in the sciences. And although the "Applied" designation is intended to refer to a professional-level degree, we are concerned that this may result in some confusion with other degree names, such as Master of Applied Science (M.A.Sc.), which is frequently used for Engineering masters degrees, or McGill's 33 M.Sc.A. degrees in fields such as Animal Science, Bioresource Engineering, Human Nutrition, Nursing, Occupational Health, etc. We think that there are important policy decision that must be taken at the level of the University to deal with the above reservations.

Signature: _____  _____**Date:** December 12, 2019

María Sierra Córdoba Serrano, Dr.

From: María Sierra Córdoba Serrano, Dr.
Sent: Tuesday, December 10, 2019 10:18 AM
To: Carola Weil
Cc: Victoria Dash, Ms.
Subject: FW: Consultations for a new SCS Program Proposal - MSc. - RSVP by December 11, 2019

fyi

From: Mary Hunter, Dr. <mary.hunter2@mcgill.ca>
Sent: Monday, December 9, 2019 1:32 PM
To: María Sierra Córdoba Serrano, Dr. <maria.cordobaserrano@mcgill.ca>
Subject: Re: Consultations for a new SCS Program Proposal - MSc. - RSVP by December 11, 2019

Dear Maria Sierra,
Thank you for this update. I don't think there will be a problem as our program is more 'academic' than 'applied'.
All best,
Mary

On Dec 9, 2019, at 1:26 PM, María Sierra Córdoba Serrano, Dr. <maria.cordobaserrano@mcgill.ca> wrote:

Dear Mary,

Thank you for your email.

Because the program is an applied **communication** program, I think they want to know that your department is OK with the proposal in general; more specifically, I believe the point is to confirm that it doesn't compete with your program.

Having said that, the courses that are more communication-related are in Stream 1, which is outlined on pages 19-21 of the document that was sent to you.

I hope this helps. Thank you very much in advance.

Best regards,
MS

María Sierra Córdoba Serrano, Ph.D.
Associate Professor & Assoc. Director
McGill University
Translation Studies
688 Sherbrooke Street West, Room 1024
Montréal, Québec H3A 3R1 Canada

maria.cordobaserrano@mcgill.ca

T: 514 398-6823

<image001.jpg>

From: Mary Hunter, Dr. <mary.hunter2@mcgill.ca>

Sent: Monday, December 9, 2019 8:57 AM

To: María Sierra Córdoba Serrano, Dr. <maria.cordobaserrano@mcgill.ca>

Subject: Re: Consultations for a new SCS Program Proposal - MSc. - RSVP by December 11, 2019

Dear Maria,

I had a quick look through the documents but I couldn't find a section that outlines what is being asked of our department (ie. what courses you are proposing to include). Could you please send me the page number or let me know where to find this information?

All best,
Mary

Mary Hunter
Chair and Associate Professor
Department of Art History and Communication Studies
McGill University
Arts Building
853 Sherbrooke Street West
Montreal, QC H3A 0G5
Canada

I would like to acknowledge that McGill is situated on the traditional and unceded territory of the Kanien'kehà:ka (Mohawk), a place which has long served as a site of meeting and exchange amongst nations.

On Dec 7, 2019, at 2:57 PM, María Sierra Córdoba Serrano, Dr.

<maria.cordobaserrano@mcgill.ca> wrote:

Dear Colleagues,

I hope that the end of the semester is going well.

This is a kind reminder to let you know that the deadline to submit your consultation forms concerning the M.Sc. (Applied) in Multilingual Digital Communication proposed by the School of Continuing Studies is fast approaching. We need the returned forms by this **Wednesday, Dec. 11.**

Thank you very much in advance for your input and collaboration.

Best,
María Sierra

María Sierra Córdoba Serrano, Ph.D.
Associate Professor & Assoc. Director
McGill University
Translation Studies
688 Sherbrooke Street West, Room 1024
Montréal, Québec H3A 3R1 Canada
maria.cordobaserrano@mcgill.ca
T: 514 398-6823

<image003.jpg>

From: Carola Weil <carola.weil@mcgill.ca>
Sent: Tuesday, November 12, 2019 3:12 AM
To: Antonia Maioni, Prof. <antonia.maioni@mcgill.ca>; Michael Fronda, Prof. <michael.frona@mcgill.ca>; Kimiz Dalkir, Professor <kimiz.dalkir@mcgill.ca>; Michel Biron, Prof. <michel.biron@mcgill.ca>; Audrey Coussy, Prof. <audrey.coussy@mcgill.ca>; Jane Everett, Prof. <jane.everett@mcgill.ca>; Mary Hunter, Dr. <mary.hunter2@mcgill.ca>; Eugenio Bolongaro, Prof. <eugenio.bolongaro@mcgill.ca>; Luis Alonso-Ovalle, Prof. <luis.alonso-ovalle@mcgill.ca>
Cc: María Sierra Córdoba Serrano, Dr. <maria.cordobaserrano@mcgill.ca>; Diana Iasenza <diana.iasenza@mcgill.ca>; Victoria Dash, Ms. <victoria.dash@mcgill.ca>
Subject: Consultations for a new SCS Program Proposal - MSc. - RSVP by December 11, 2019
Importance: High

Attn: Faculty of Arts

Dean Antonia Maioni; Assoc. Dean Michael Fronda
DÉPARTEMENT DES LITTÉRATURES DE LANGUE FRANÇAISE, DE TRADUCTION ET DE CRÉATION (Michel Biron, (Interim Chair), Audrey Coussy, Jane Everett)
Art History & Communications Studies (Mary Hunter)
Languages, Literatures and Cultures (Eugenio Bolongaro)
Linguistics (Luis Alonso Ovalle)
Information Studies (Kimiz Dalkir)

Dear Antonia and Colleagues,

Attached please find a proposal for a new applied Master's degree in Multilingual Digital Communication (Non-Thesis) that the School of Continuing Studies would like to submit for Senate approval. This will be a blended program delivered predominantly online with a short in-person immersion component. The program is designed to be cross-disciplinary and to address workforce needs for so-called "T-shaped" or "Pi-shaped/Key-shaped" professionals; ie. individuals with a combination of deep knowledge/skills and a set of cross-cutting expertise (durable skills) that cut across disciplines. It builds on

expertise at the School of Continuing Studies as well as across the university. The MsC in Multilingual Digital Communication is aimed at a mid-career entrant with at least five years' work experience.

This proposal arises out of a variety of conversations across the university and is aligned with the University's strategic priorities as well as SCS' mandate to provide innovative, actionable knowledge to adult learners, that supports current and future workforce development needs, and that is aligned with McGill University research and teaching priorities to reach new audiences.

Dr. María Sierra Cordoba Serrano of the School of Continuing Studies is the lead for this program and has been copied on this email. She/we would be happy to meet/discuss with you to address any questions you might have.

It is our hope to submit this proposal to SCTP before the end of the calendar year for consideration in January and would greatly appreciate your response no later than December 11, 2019.

Thank you very much in advance for your input and cooperation!

With best regards,
Carola

Carola Weil, PhD
Dean / Doyenne
School of Continuing Studies / École d'éducation permanente
McGill University / Université McGill
680 rue Sherbrooke Ouest, # 1240
Montréal (Québec) H3A 3R1
T: 514-398-6156
Email: carola.weil@mcgill.ca
www.mcgill.ca/scs
www.facebook.com/mcgillscs
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Learn more about our history / pour en savoir plus sur notre histoire scs.mcgill.ca/50
 McGill University is on land which long served as a site of meeting and exchange among Indigenous peoples, including the Haudenosaunee and Anishinabeg nations. We acknowledge and thank the diverse Indigenous people for their legacy.
L'Université McGill est sur un emplacement qui a longtemps servi de lieu de rencontre et d'échange entre les peuples autochtones, y compris les nations Haudenosaunee et Anishinabeg. Nous reconnaissons et remercions les divers peuples autochtones pour leur héritage.

Bryan Jim, Mr.

From: David Alan Stephens, Prof.
Sent: Tuesday, December 10, 2019 9:24 PM
To: María Sierra Córdoba Serrano, Dr.
Cc: R. Bruce Lennox, Dr.; Carola Weil; Bettina Kemme
Subject: FW: Re: Consultations for a new SCS Program Proposal - MSc. in Multilingual Digital Communication (Non-Thesis) - RSVP by December 11, 2019

Dear Dr Córdoba Serrano

Thank you for your email to the Faculty of Science and to the Director, School of Computer Science.

Although the details of the proposed program that you forwarded do sound interesting, our Faculty feels that the general context of the program needs considerable further discussion before we could return an assessment via the consultation document. I have had several communications with GPS on the proposal, including an exchange with Dean Nalbantoglu, but they have not fully clarified matters.

Whereas we are supportive in principle of this type of program being offered by SCS, we would feel more comfortable if all relevant matters were fully discussed before such a program would begin its passage through the McGill approvals process.

Dean Lennox and I would be happy to be involved in these discussions, along with other Faculties, at the appropriate time.

best wishes
 Dave

~~~~~  
 David A. Stephens  
 Vice-Dean, Faculty of Science

Department of Mathematics & Statistics  
 McGill University  
 805 Sherbrooke Street West  
 Montreal, Quebec, Canada  
 H3A 0B9  
 Tel: 514-398-2005  
 Fax: 514-398-3899  
 david.stephens@mcgill.ca

----- Original Message -----

Subject: RE: Consultations for a new SCS Program Proposal - MSc. in Multilingual Digital Communication (Non-Thesis)  
 - RSVP by December 11,

2019

Date: 2019-12-07 14:57

From: María Sierra Córdoba Serrano, Dr.

<maria.cordobaserrano@mcgill.ca>

To: "R. Bruce Lennox, Dr." <bruce.lennox@mcgill.ca>, "Bettina Kemme, Prof." <bettina.kemme@mcgill.ca>, "Jackie Cheung, Professor"

<jackie.cheung@mcgill.ca>

Cc: Carola Weil <carola.weil@mcgill.ca>, Diana Iasenza <diana.iasenza@mcgill.ca>, "Victoria Dash, Ms."

<victoria.dash@mcgill.ca>

Dear Colleagues,

I hope that the end of the semester is going well.

This is a kind reminder to let you know that the deadline to submit your consultation forms concerning the M.Sc. (Applied) in Multilingual Digital Communication proposed by the School of Continuing Studies is fast approaching. We need the returned forms by this WEDNESDAY, DEC. 11.

Thank you very much in advance for your input and collaboration.

Best,

María Sierra

María Sierra Córdoba Serrano, Ph.D.

Associate Professor & Assoc. Director

MCGILL UNIVERSITY

TRANSLATION STUDIES

688 Sherbrooke Street West, Room 1024

Montréal, Québec H3A 3R1 Canada

maria.cordobaserrano@mcgill.ca

T: 514 398-6823

FROM: Carola Weil <carola.weil@mcgill.ca>

SENT: Tuesday, November 12, 2019 3:56 AM

TO: R. Bruce Lennox, Dr. <bruce.lennox@mcgill.ca>; Bettina Kemme, Prof.

<bettina.kemme@mcgill.ca>; Jackie Cheung, Professor <jackie.cheung@mcgill.ca>

CC: María Sierra Córdoba Serrano, Dr.

<maria.cordobaserrano@mcgill.ca>; Diana Iasenza <diana.iasenza@mcgill.ca>; Victoria Dash, Ms.

<victoria.dash@mcgill.ca>

SUBJECT: FW: Consultations for a new SCS Program Proposal - MSc. in Multilingual Digital Communication (Non-Thesis) - RSVP by December 11,

2019

IMPORTANCE: High



ATTN: FACULTY OF SCIENCES/COMPUTER SCIENCES

Dear Bruce,

Dear Bettina and Jackie,

Attached please find a proposal for a new applied Master's degree in Multilingual Digital Communication (Non-Thesis) that the School of Continuing Studies would like to submit for Senate approval. This will be a blended program delivered predominantly online with a short in-person immersion component. The program is designed to be cross-disciplinary and to address workforce needs for so-called "T-shaped" or "Pi-shaped/Key-shaped" professionals; ie.

individuals with a combination of deep knowledge/skills and a set of cross-cutting expertise (durable skills) that cut across disciplines.

It builds on expertise at the School of Continuing Studies as well as across the university. The MsC in Multilingual Digital Communication is aimed at a mid-career entrant with at least five years' work experience.

This proposal arises out of a variety of conversations across the university and is aligned with the University's strategic priorities as well as SCS' mandate to provide innovative, actionable knowledge to adult learners, that supports current and future workforce development needs, and that is aligned with McGill University research and teaching priorities to reach new audiences.

Dr. María Sierra Cordoba Serrano of the School of Continuing Studies is the lead for this program and has been copied on this email. She/we would be happy to meet/discuss with you to address any questions you might have about the program as a whole or particular courses.

It is our hope to submit this proposal to SCTP before the end of the calendar year for consideration in January and would greatly appreciate your response no later than December 11, 2019. Consultation forms are attached for your convenience. If you have no other questions or concerns, we would appreciate it, if you could return the signed form to Dr. Cordoba Serrano (maria.cordobaserrano@mcgill.ca).

Thank you very much in advance for your input and cooperation! We look forward to collaborating with colleagues in Computer Science and other departments as desired on this effort.

With kind regards,

Carola

CAROLA WEIL, PHD

DEAN / DOYENNE

SCHOOL OF CONTINUING STUDIES / ÉCOLE D'ÉDUCATION PERMANENTE

MCGILL UNIVERSITY / UNIVERSITÉ MCGILL

680 RUE SHERBROOKE OUEST, # 1240

MONTRÉAL (QUÉBEC) H3A 3R1

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EMAIL: CAROLA.WEIL@MCGILL.CA

WWW.MCGILL.CA/SCS [1]

WWW.FACEBOOK.COM/MCGILLSCS [2]

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**APPENDIX 1****CONSULTATION REPORT FORM  
RE PROGRAM PROPOSALS****DATE:** December 10, 2019**TO:** SCTP**FROM:** Desautels Faculty of Management

The attached proposal has been submitted to the Curriculum Committee, and it has been decided that your department should be consulted.

**Program Title:** Master of Science (Applied) in Multilingual Digital Communication; Non-Thesis

Would you be good enough to review this proposal and let me know as soon as possible, on this form, whether or not your department has any objections to, or comments regarding, the proposal. Specifically, a course [or courses] taught by your department that has [have] been included in the program's list of courses.

\_\_\_\_\_ **NO OBJECTIONS**                        **X**   **SOME OBJECTIONS**

**COMMENTS:**

While we do not believe that we have the expertise to comment on the academic content of the program, we are very concerned that the program is being proposed as a Masters degree; this breaks with University practice. The number of research active faculty in the proposed program is very limited and professional accreditation bodies are always concerned with the number of research active and full time faculty that are involved in offering a program before approval is granted. We believe that the program proposed should be considered a Graduate Diploma program. We therefore have strong objections to the program being approved as a Masters program. A much greater discussion is required before supporting any request for Continuing Studies to offer Masters programs.


**Signature:** \_\_\_\_\_**Date:** Dec 10, 2019

# M.Sc. (Applied) in Multilingual Digital Communication; Non-Thesis

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**Stream 1: Localized Global Communication (LGC)**

**Stream 2: Multilingual Communication Technologies (MCT)**

**45 credits**

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Prepared by: Dr. María Sierra Córdoba Serrano, Associate Professor & Associate Director, Translation Studies Unit, School of Continuing Studies, and Dr. Nicolette Papastefanou, Faculty Lecturer & Area Coordinator (PR and Marketing), with the assistance of Dr. Marta Allard, SDL, Solutions Architect.

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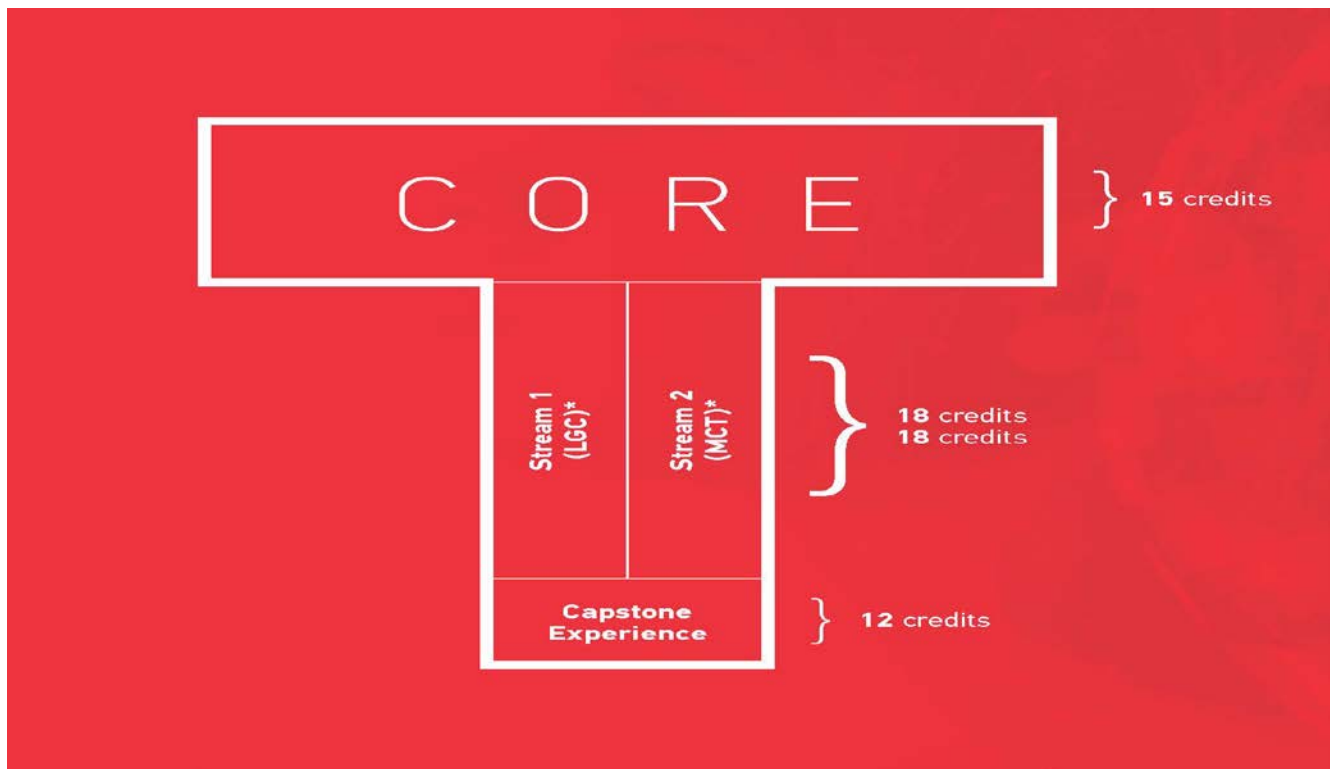
Appendix 1 to 4 – available upon request (include details about market research, data collection and interview findings)

Appendix 5 – Sample of 100% fully online masters in prominent English-speaking universities

Appendix 6 – Sample of other peer (particularly R1 and U15) institutions whose Continuing Education Units offer graduate degrees

Appendix 7 – Teaching model and possible list of course assignments

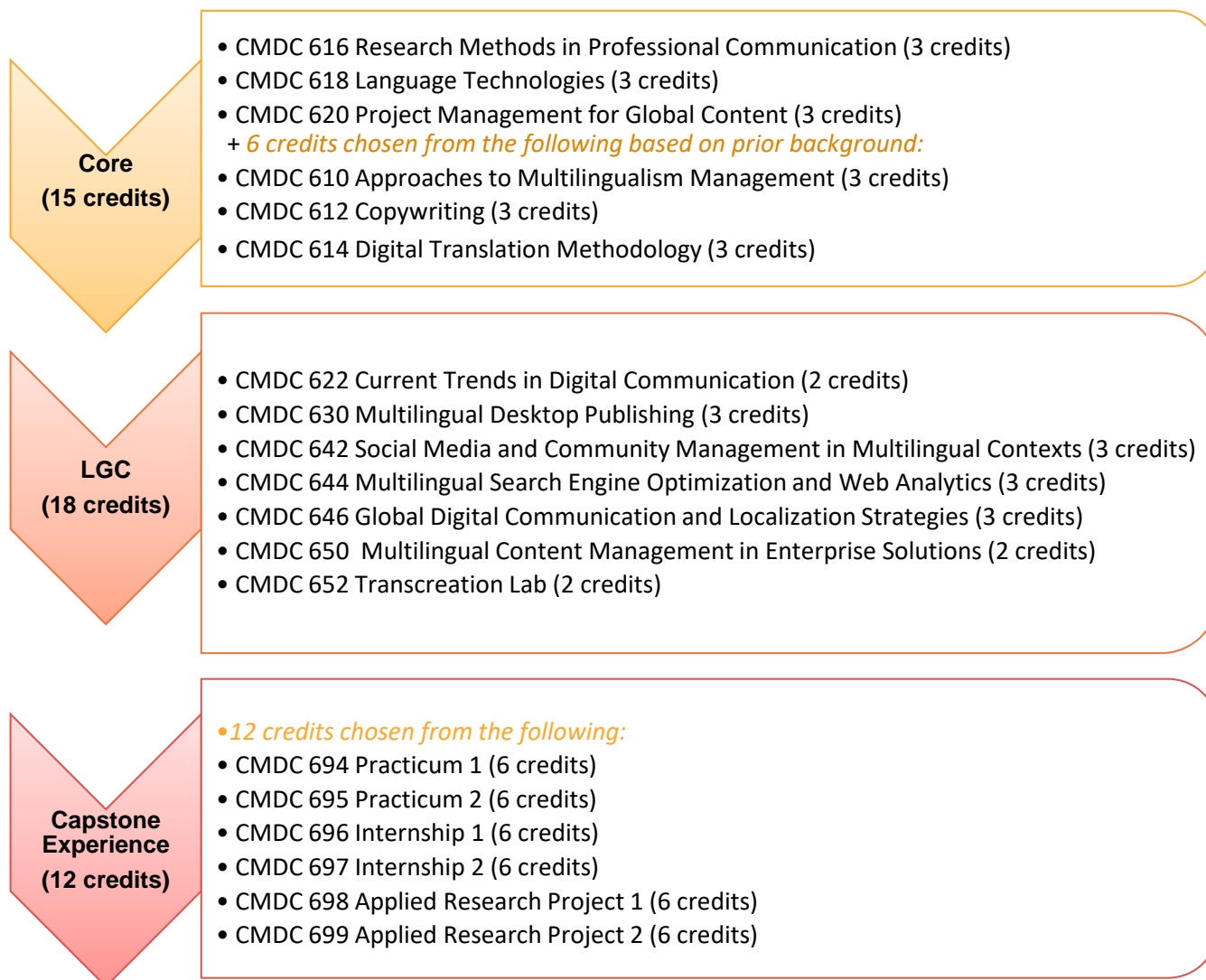
## 1. Program at a Glance



The M.Sc. (Applied) in Multilingual Digital Communication (non-thesis) is an online 45-credit professional, transdisciplinary and cross-industry curriculum that aims to meet industry needs for T-shaped communication professionals, with breadth and depth of knowledge. It comprises three elements: a core module, a choice of two streams and a capstone experience. The 15-credit core module focuses on transversal competencies in translation, research, project management, copywriting and multilingualism management. The 18-credit stream offers two specialization options: localized global communication (LGC) or multilingual communication technologies (MCT). The LGC stream consists of creating localized and transcreated content based on search engine optimization (SEO) and the specifics of various digital platforms and integrating this content into general global communication strategies. The MCT stream focuses on optimizing multilingual communication management processes and implementing the required language technologies. The program culminates with a 12-credit capstone experience in the form of a practicum, internship or applied research project.

**Nota Bene 1:** The present document outlines the fundamental concept behind the proposed program. Therefore, we needed to be able to use certain labels (“core”, “specialization/stream”, “T-shaped” curriculum) that convey that concept, which do not always align with the existing categories used by McGill (such as “required” and “complementary” courses) and the resulting structure these categories lead to. Apparent discrepancies in the number of credits between this document and the official program proposal form are due to this fact, but in essence, both documents include the same information, under a different mold. To see how our concept translates into the existing required categories by McGill, please see the “new program proposal” form.

## Stream 1: Localized Global Communication (LGC)



**Nota Bene 2:** The concept of a “core” module in this proposal (that is a module that includes transversal, broad competencies) does not correspond entirely to the category “required courses” in the existing McGill nomenclature. For instance, the fact that a course is common to both streams makes it automatically a required course under the existing McGill nomenclature, but it is still not a core course, as it covers specialized skills. (CMDC 630 Multilingual Desktop Publishing or CMDC 650 Multilingual Content Management in Enterprise Solutions are examples of this. The same applies to the different courses included in the “Capstone Experience”). Our priority in this document has been to explain the concept behind the program, which is based on the nature of the competencies (broad or deep), and the sequence of competency acquisition (from general to specific), which is, after all, what many of our colleagues at the university have found most original about the proposal, given existing interest and efforts in building modular graduate degrees.

## Stream 2: Multilingual Communication Technologies (MCT)

### Core (15 credits)

- CMDC 616 Research Methods in Professional Communication (3 credits)
- CMDC 618 Language Technologies (3 credits)
- CMDC 620 Project Management for Global Content (3 credits)
- + *6 credits chosen from the following based on prior background:*
- CMDC 610 Approaches to Multilingualism Management (3 credits)
- CMDC 612 Copywriting (3 credits)
- CMDC 614 Digital Translation Methodology (3 credits)

### MCT (18 credits)

- CMDC 623 Artificial Intelligence in Multilingual Communication (3 credits)
- CMDC 630 Multilingual Desktop Publishing (3 credits)
- CMDC 643 Technical Writing (2 credits)
- CMDC 645 Advanced Language Technologies: Evaluation and Implementation (3 credits)
- CMDC 647 Machine Translation and Post-Editing (3 credits)
- CMDC 650 Multilingual Content Management in Enterprise Solutions (2 credits)
- CMDC 653 Data Structure for Language Professionals (2 credits)

### Capstone Experience (12 credits)

- *12 credits chosen from the following:*
- CMDC 694 Practicum 1 (6 credits)
- CMDC 695 Practicum 2 (6 credits)
- CMDC 696 Internship 1 (6 credits)
- CMDC 697 Internship 2 (6 credits)
- CMDC 698 Applied Research Project 1 (6 credits)
- CMDC 699 Applied Research Project 2 (6 credits)



## Key Terms

**Language technologies:** Technologies that supports repeatable and scalable processes handling a broad range of multilingual content volumes. Software for written-word work includes translation memory (TM), translation environments, terminology management, translation quality assessment and checking, authoring, content enrichment, information extraction, audio-visual adaptation and systems for machine translation (MT) and translation management systems (TMSs). (Adapted from CSA, 2018, p. 8).

**Language Technology Management:** The integrated planning, design, optimization, use and control of language-related technological products, processes and services.

**Lights-out project management:** Project management in which software handles the project from quoting to invoicing without the need for human interaction, although even the most sophisticated lights-out systems retain some human-centred elements (Pielmeier, 2017).

**Localization:** A language practice that extends beyond translating the written word to adapting web and mobile products and software applications to work in other markets. Localization enables support for elements such as local currency, date and time formats, and regulations – as well as language or language variety. (Adapted from CSA, 2018, p. 26).

**Localization/language engineering:** The process of finding and fixing localization problems, developing globalization-ready software or media products, and testing the results. The solutions in this process include the use of filters for file format conversion, bug tracking tools, internationalization checkers, and visual or audio localization tools that overlay a foreign-language interface onto an existing product. (Adapted from CSA, 2018, p. 42).

**Machine translation:** A system that automatically translates source-language content into the target language without human intervention. Machine translation may be integrated with other software, such as translation memory, and human professionals may edit its output to correct errors or style, a process known as “**post-editing**.” (CSA, 2018, p. 42). **Neural machine translation** is a new approach to machine translation that entered the mainstream in 2016. Inspired by the ways that biological brains work, it uses networks of virtual neurons to translate text. Neural nets allow computers to learn from massive datasets of previously translated sentences.

**Multilingualism:** Denotes the fact that aggregate communication in society, rather than taking place through one language only, takes place through two languages or more (adapted from Grin, 2017, p. 55). Societal multilingualism can be internal (for example, communication within a country between two or more language groups) or external (communication between language groups in different countries). It is therefore important to emphasize that for our purposes (in line with other authors), multilingual communication includes bilingual communication, and that it stands to reason that bilingual digital communication between the two official languages of Canada falls within the scope of this program.

**SEO:** The process of designing a website and its content so that search engines find the site without being paid to do so (Roberts & Zahay, 2012, p. 471). In SEO, a structured approach is used to increase the relative ranking of a company or its products or services in search engine results for selected keywords (Chaffey & Smith, 2013, p. 598).

**Social media community management:** Community is created as an outcome and activity of social media use (Roberts & Zahay, 2012, p. 238). The community consists of current customers, target audiences and all the people who interact with a company, brand or non-profit organization directly and indirectly online. Community management refers to the relationships built with these communities through social media (Facebook, Twitter, Instagram, Snapchat, etc.) and how companies and institutions seize opportunities to interact with them in public online spaces for the social or other good (Kumar, 2017).

**T-shaped professionals:** Individuals sought after not only for their in-depth knowledge in specialized areas (the vertical stroke of the T), but also for their agility and broad-based competencies and soft skills (horizontal stroke) (Gardner & Estry, 2017, p. 2)

**Transcreation:** A practice that involves creating, re-creating or significantly adapting content (text, images and other visuals) to preserve its creative and emotional intent in another language.

**Web 2.0:** Second-generation Internet that provides better interactivity, information sharing and collaboration (Roberts & Zahay, 2012, p. 472). This interactive culture of the Internet is created through a collection of web services that facilitate certain behaviours online such as community participation and user-generated content through social media as well as rating, interaction, liking, sharing and data exchange. This is now evolving into Web 3.0 (Chaffey & Smith, 2013, p. 134, 601). Third-generation Internet expected to have semantic abilities that support learning and the personalization of web experiences (Roberts & Zahay, 2012, p. 472).

**Web 3.0:** The next-generation web incorporating high-speed connectivity, complex cross-community interactions and an intelligent web. Web 3.0 is characterized by more immersive, virtual and 3D content as well as relevant tailored content, syndicated content, data feeds, data exchange between networks and automated decisions (Chaffey & Smith, 2013, p. 135, 601).

## 2. Program Rationale

Automation has taken hold in many sectors of the labour market, the language industry being no exception. In particular, two main AI-related developments have ushered the language industry into a new period of automation: **neural machine translation (NMT)** and **lights-out project management (LOPM)**. NMT entered the mainstream in 2016 and has brought about a qualitative leap in the production of automated translations (Common Sense Advisory,<sup>1</sup> 2017, p. 10). It has also radically accelerated the social usage of machine translation (Pym, 2019) and altered the public perception of the translation profession. A growing number of language service providers (LSPs)<sup>2</sup> also apply AI or another form of automation to project management (Lommel, 2017).

These AI-driven developments coincide with or may be the result of shifting client demands and expectations: apart from imposing higher volumes of content and faster turnaround times on LSPs, clients increasingly need help with “bigger content issues tied to digital transformation,” that is, business processes not limited to a set of language services (CSA, 2018, p. 45). In other words, LSPs of all shapes and sizes are being forced to move away from “translation-centric” services to offer “content-centric services, both source and target, a portfolio of content creation, processing, management, analytics, and intelligence services” (CSA, 2018, p. 46). Accordingly, they will be expected to expand beyond a relatively limited set of language services (translation, interpretation, etc.) to offer a more comprehensive bundle related to global content (content that is meant to be “consumed” in languages other than the language in which it was originally created). This can comprise content creation (in both source and target languages) and localization, but also content delivery and content management, including adapting and adopting the required language technologies and making content consistently available within an enterprise and throughout the customer experience.

This also means that, particularly in small and medium-sized companies<sup>3</sup> (which represent a significant proportion of the Canadian language industry<sup>4</sup>), the boundaries between language and communication professionals are becoming fuzzier. On the one hand, language professionals are being expected to perform other roles – sometimes only tangential to language. On the other hand, as more language service providers become global content providers (GCPs), digital global marketers and public relations experts are being compelled to acquire broader multilingual communication and translation competencies to be able to integrate localized and transcreated digital content into general global communication strategies, which also requires knowledge of language technologies

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<sup>1</sup> Hereinafter CSA.

<sup>2</sup> This category can include both private and public language service providers. For instance, the Translation Bureau, a special operating agency that reports to Public Services and Procurement Canada, falls within this category. It is in fact the 13th largest LSP in the world (Common Sense Advisory, 2019).

<sup>3</sup> In larger companies, roles may be less hybrid. In other words, language professionals and communication professionals (marketers, PR and localization specialists) may work for separate departments. Even in those cases, however, the expectation of collaboration between different but related departments is becoming a must in an integrated global communication strategy, which may include localization and other language-related facets.

<sup>4</sup> According to “Profile of the Canadian Language Industry” (2016, p. 39), the majority (88.1%) of surveyed LSPs had only one employee; 93.5% (n = 449) of sole proprietors/freelancers in the sample reported themselves as a single-employee business. Only 1.8% of surveyed LSPs had more than 20 employees.

that can enhance content management processes. All this is helping to bridge the gap between digital communication and translation/localization services.

The fundamental question at this juncture is which language and communication activities are likely to be more valued in the globally organized, tech-driven and constantly changing work environment of the 21st century. In other words, which competencies do communication and language professionals need to acquire to ready themselves for the future?

For a province like Quebec, the undisputed epicentre of translation in Canada – with approximately 6,000 translators working in the province and 80% of the country’s translators educated here (PricewaterhouseCoopers, 2012) – and a hotbed for artificial intelligence, the relevance of this question is undeniable. The themes of the most recent annual congresses of OTTIAQ, Quebec’s Order of Certified Translators, Terminologists and Interpreters, “L’art de se réinventer” (2019) and “Les relations humaines à l’ère de l’intelligence artificielle” (2018), highlight this relevance. This question also clearly preoccupies the Translation Bureau (a special operating agency that reports to Public Services and Procurement Canada and the country’s largest employer of language professionals), which is presently running a pilot project to test the application of emerging AI technologies in the translation workflow (Government of Canada, 2019).

Against this backdrop, and based on the market research conducted,<sup>5</sup> the proposed part-time program consists of an **online** 45-credit **professional** (non-thesis), **transdisciplinary** and **cross-industry** curriculum. It comprises three modular components: a core module, a choice of two streams and a capstone experience. It can be completed in two and a half years (eight semesters).

The 15-credit core module focuses on core competencies in translation, research, project management, copywriting, and institutional and corporate multilingualism management.

The 18-credit stream covers one of these two interrelated key areas of multilingual digital communication: localized global communication (LGC)<sup>6</sup> or multilingual communication technologies (MCT). The LGC stream focuses on creating localized and transcreated content based on search engine optimization (SEO) and the specifics of various digital platforms (websites, blogs, social media, Quora, Reddit, etc.) and on integrating this content into general global communication strategies. In contrast, the MCT stream focuses on optimizing multilingual communication management processes by implementing the required language technologies (e.g. translation memories, translation editing environments, quality assurance tools, translation management systems, machine translation engines and multilingual content management systems).

The program culminates with a capstone experience, an experiential learning component to further deepen the specialized competencies acquired in the stream of choice. It also includes an optional face-to-face immersive component that will take place once a year.

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<sup>5</sup> See section 3.2.

<sup>6</sup> This process is also known as “glocalization,” a term that combines “globalization” and “localization.” It was coined in the *Harvard Business Review* in 1980 by sociologist Roland Robertson and refers to the adaptation of **globally** marketed products and services to **local** markets.

By focusing on broad-based competencies and soft skills, as well as in-depth knowledge in specialized areas, in other words, by bundling both disciplinary and boundary-spanning competencies, the proposed curriculum aims to address the unmet needs of employers and policymakers, in Quebec, Canada and worldwide, for new types of T-shaped professionals who can quickly adapt to innovation and rapid change in the workplace (Karjalainen et al., 2009; Gardner & Estrý, 2017). Learners' previous background and work-related experience, combined with the proposed coursework and capstone experience, may very well help T-shaped professionals to evolve into key-shaped professionals (Bridgstock, 2015) – individuals with one very deep area of expertise, accompanied by several others of varying depth. These different areas of disciplinary expertise become the “teeth” of the key.

In this vein, the selected mode of delivery – an online format that combines live synchronous live classes with self-directed components within a flipped classroom – enhances the agile, collaborative, problem-based, experiential and transdisciplinary learning approach we seek to embrace. With a dedicated team of learning and user experience designers, the School of Continuing Studies (SCS) is uniquely positioned to act as an incubator for new online approaches to lifelong learning, addressing the need for flexibility and accessibility, both for working professionals living near SCS and those based elsewhere. In other words, the format of delivery will provide access to learners for whom the proposed professional graduate program would otherwise be unattainable due to time, logistical or geographical limitations. The online format also allows us to hire world-class practitioners (please see **Appendix 7**) and adjunct professors from anywhere in Quebec, Canada or abroad who may not always be able to contribute their expertise on site in Montreal. Please see **Appendix 7**, which includes a possible list of course assignments (to be confirmed). Please see **Appendix 5**, which includes a sample of 100% fully online master's programs at prominent English-speaking universities in Canada, the U.S., the UK, and Australia, and **Appendix 6**, which includes a sample of other peer institutions (particularly R1 and U15) whose continuing education units offer graduate degrees.

Moreover, the format of delivery of the program, its modular structure and its interdisciplinary nature also lend themselves to future collaborations with other professional graduate programs offered by other departments at McGill.

### **Comparable programs at McGill and elsewhere**

Within McGill:

- The Département des littératures de langue française, de traduction et de création offers a Master's degree that can include Translation- or Translation Studies–related coursework and a thesis. However, it is a research-oriented program and its focus is on literary translation.
- The Department of Linguistics offers courses in theoretical computational linguistics but does not focus on practical applications.
- The cultural studies approach to media and communication studies adopted by the research-oriented Master's degree at the Department of Art History and Communication Studies differs from the focus of the proposed program, which is on applied and strategic communication.

- Courses related to language/localization engineering, natural language processing and machine translation offered by Computer Sciences (Faculty of Sciences) and Electrical Computer Engineering (Faculty of Engineering) are targeted to technology developers, rather than language professionals.

In short, the proposed program does not compete with other programs at McGill University – in fact, it serves as a complement to them.

Beyond McGill, there are no comparable Master's programs in Quebec or elsewhere in Canada. None of the existing Master's degrees in Translation across the country (at the Université de Montréal, Concordia University, Université de Sherbrooke University, University of Ottawa, York University, University of Alberta) focuses on localization or language technology management.

Concordia University offers a face-to-face 15-credit Graduate Certificate in Translation Technologies aimed at informed users of these technologies. In comparison, our proposed program (45 credits) goes beyond equipping language professionals to critically use these evolving systems. Rather, it aims to prepare versatile expert users who will be able to lead the optimization of multilingual content management processes, as well as evaluate and select the best solutions and tools. These expert users will be well positioned to bridge the gap between users (i.e. translators, interpreters, editors, terminologists and project managers) and management, sales and technology development teams, and language service clients.

Similarly, existing Master's programs in digital communication offered in Quebec and the rest of Canada do not delve into the specificities of multilingual communication. The only relatively comparable Master's program in North America is the Master of Translation and Localization Management at the Middlebury Institute of International Studies in Monterey (California), but the latter is a full-time program and only the second year of this two-year program is delivered online. Its tuition fees (US\$83,188 for two years) are also substantially higher than the program we propose here.

## 2.1 Target Audience

### Stream 1: Localized Global Communication

Students with a Bachelor's degree in Translation and/or Localization, Communication Studies, Linguistics or Modern Languages, or a Bachelor's degree with coursework in another language- or communication-related discipline, or a Bachelor's degree in any other discipline with at least two years of language-industry or communication-related experience.

- **Expected occupations:**

Prospective job titles may include Multilingual Social Media and Website Specialist, Social Media Manager, Translation and Localization Specialist, Transcreator, (Bilingual/Multilingual) Community Engagement Manager, Global Communication Strategist, Translation Manager, Global Procurement Director.

## Stream 2: Multilingual Communication Technologies

Students with a Bachelor's degree in Translation, Localization, Computational Linguistics or a related discipline, or a Bachelor's degree with coursework in Translation, Localization or Computational Linguistics, or a Bachelor's degree with at least two years of language-industry experience.

- **Expected occupations:**

Prospective job titles may include Language Technology Implementation Manager, Language Technology Solutions Architect, Language Technology Production Support Specialist, Language Technology Training Specialist, Localization Engineer, File Engineer, Machine Translation Specialist, Localization Project Manager, Director of Language Technology Solutions.<sup>7</sup>

### **Admission Requirements**

- A Bachelor's degree (or equivalent as recognized by McGill University) is a minimum requirement.
- The ideal applicant will have a Bachelor's degree in one or more of the following: Translation, Localization, Communication Studies, Linguistics, Modern Languages; or a Bachelor's degree in any discipline with coursework in a language- or communication-related discipline, or with at least two years of language or communication-related industry experience.
- Minimum Cumulative Grade Point Average (CGPA) of 3.0 out of a possible 4.0, or a Grade Point Average (GPA) of 3.2 out of 4.0 in the last two years of full-time studies.
- An interview-based assessment will be conducted to determine whether the program is a good fit for the candidate.
- Applicants will also be required to present a written statement of purpose (1,000 words) in English, as well as in French and/or Spanish. The essay should explain why their background and experience makes them an ideal candidate for the program, and how success in the program will enable them to achieve their professional goals. A current curriculum vitae should accompany the written statement.
- Applicants with a Bachelor's degree outside Canada, the United States, Australia, New Zealand or the United Kingdom are required to take the Test of English as a Foreign Language (TOEFL). A minimum score of 100 for the Internet-based TOEFL exam test (iBT; 600 for the paper-based test, PBT) with each component score not less than 20 is required. Please use the codes McGill 0935 when writing the exam.

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<sup>7</sup> For more information about diverse and changing job titles in the language industry, see Esther Bond (2018). "The Stunning Variety of Job Titles in the Language Industry," in the June 1, 2018, issue of *Slator*. [Online](#)



- Applicants may write the IELTS (International English Language Testing Systems) instead of the TOEFL exam. A minimum overall band of 7.0 is required, with each component score not less than 7.0. IELTS test scores must be sent electronically by IELTS directly to McGill University using the McGill code 0935.

### 3. Curriculum Design

#### 3.1 Curriculum design rationale

The explosion of digital media and participatory online culture of Web 2.0 technologies, and inevitable shift to Web 3.0 technologies in the near future, have intensified the demand for translated, localized and transcreated digital content, as well as the technologies to manage this content. Research firm Common Sense Advisory estimates that the language services and technology market was worth approximately \$46.52 billion in 2018<sup>8</sup> (CSA, 2018, p. 1). As more companies, governments and institutions worldwide embrace the need for the services and expertise of language and communication professionals to forge meaningful connections with individuals and social groups from multiple language and cultural backgrounds, they are simultaneously turning to automated solutions and widespread application of artificial intelligence to manage a broad range of multilingual content volumes and support repeatable and scalable processes (CSA, 2018, p. 8).

The resulting tension between these two imperatives has given rise to an existential angst in the language and communication industry. The proposed program aims to respond to this uncertainty with a transdisciplinary curriculum that moves beyond a reductive human-machine dichotomy to lay the groundwork for a new dynamic that leverages the strengths and contributions of both. In particular, this dynamic translates into two complementary program streams: Localized Global Communication (LGC) and Multilingual Communication Technologies (MCT). The LGC stream primarily (albeit not exclusively) focuses on automation-resistant communication competencies, that is, what makes multilingual communication quintessentially human. This finds its ultimate expression in the practice of transcreation, in which content (text, images and other visuals) is not only reproduced in another language, but also re-created to preserve its creative and emotional intent in another culture. The MCT stream, on the other hand, features a technology-based curriculum that focuses on optimizing multilingual communication management processes and implementing the required language technologies. In this context, human intervention is nevertheless indispensable to process optimization and quality output.

#### 3.2 Data informing curriculum design

In order to determine the demand for this Master's degree, we:

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<sup>8</sup> The market for outsourced language services and supporting technology grew 7.99% from 2017 to 2018. It is projected to grow an average of 6.00% worldwide over the next two years and 7.50% in 2021, yielding a cumulative rate of 6.51%. Different regions will grow at different rates, depending on local conditions (CSA, 2018, p. 3).



- reviewed industry reports;<sup>9</sup>
- commissioned a market research report from the Education Advisory Board (EAB). We asked EAB to collect data to evaluate market demand for an online Master's-level applied translation and specialized communication program (working title when the request was submitted to EAB in December 2018), which presented several streams. The selected geographic criteria for the market research were national and international (primarily the Americas). We asked them to specifically collect data about the demand for different concentrations and language combinations, as well as format of delivery (face-to-face, online or a combination on both). Based on the request form submitted by McGill's School of Continuing Studies containing these criteria, EAB produced the **report attached in Appendix 1**. The report includes a combination of qualitative interviews with administrators of other related programs in Canada, the U.S. and Europe, as well as quantitative labour market data analytics and secondary research findings.

To propose the specific streams and different courses, and to have more data specific to Quebec/Canada, the abovementioned general data were triangulated with additional data from online job postings on the search engine Indeed. A summary of the analysis of the sample of ads collected in the fields of marketing, public relations, digital communication and translation<sup>10</sup> is included in **Appendix 2**. A summary of the analysis of the sample collected in the field of language technology<sup>11</sup> is included in **Appendix 3**.

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<sup>9</sup> Common Sense Advisory. *The Language Services Market*, CSA, 2018.

Common Sense Advisory. *The Language Services Market*, CSA, 2017.

Malatest, R. A & Associates Ltd. *Profile of the Canadian Language Industry*, 2016.

<sup>10</sup> In order to do so, we analyzed active job ads posted on Indeed in 2018 that included selected keywords (see Appendix 2 for details). The keywords were entered three different times with different location search criteria each time. Job opportunities were searched in **Montreal**, then **Canada** and finally the **United States**. Ads were compiled and analyzed by focusing on key skills required, qualifications, specific job tasks included in the ad and so forth. During the first search round, we focused on keywords pertaining to marketing and translation, which yielded 120 results. The findings were subsequently reviewed, and irrelevant data were deleted from the Excel file. This left a total of 100 results in the final sheet. Once the data were collected, we proceeded with our analysis by identifying patterns among the words, skills and tasks mentioned. This allowed us to confirm potential employer needs regarding public relations and translation and led us to perform a second search round. With new keywords, more focused on public relations, we obtained 50 new results, which were included in a separate file. Once again, the findings were reviewed, leaving a total of 42 results in the final sheet. These were subsequently analyzed, similar to the findings from the first round.

<sup>11</sup> We collected data from online active job ads posted on Indeed in 2018 that included selected keywords (see Appendix 3 for details). In some specific cases, other engines such as Glassdoor and LinkedIn were also consulted. The keywords were entered three different times with different location search criteria each time. Job postings were searched in **Montreal**, then **Canada** and finally the **United States**. Ads were compiled and analyzed by focusing on key skills required, qualifications, specific job tasks included in the ad and so forth. The first search round yielded 172 relevant results. The findings were subsequently reviewed to narrow down the search. Irrelevant data were deleted from the Excel file and approximately 10 new keywords were suggested for a second search round, the most fruitful of which was "Language Implementation Specialist." The same search engines were used, with the same methodology regarding location criteria, leading to a total of 32 results, including the filtered results from the first round.

Additionally, in the case of the Multilingual Communication Technologies stream, given the emerging nature of some roles and the challenge of finding well-established labels to describe these roles, semi-structured interviews with a convenience sample of industry experts were also conducted.

The interviews are summarized here (five of the six interviewees were located in Quebec companies, or global companies with a presence in Quebec):

| Interview | Role                                                              | Employer       |
|-----------|-------------------------------------------------------------------|----------------|
| 1         | Senior Product Manager                                            | LSP            |
| 2         | Head of Technical Services, Machine Translation Solutions         | LSP            |
| 3         | Solutions Architect                                               | LSP            |
| 4         | Director of Solutions Development                                 | LSP            |
| 5         | Global Professional Services Manager                              | LSP            |
| 6         | Director, Linguistic Services and Corporate Social Responsibility | Private Sector |

A summary of the interview findings is attached in **Appendix 4**.

### 3.3 Curriculum design framework and online learning model

- The curriculum design is rooted in a **multidisciplinary** knowledge base characterized by a “**T-shaped**” framework (Guest, 1991; Iansiti, 1993; Gardner & Estray, 2017).

The curriculum design draws on the disciplinary traditions of Translation Studies, in particular Localization Management (an emerging academic subdiscipline at the crossroads of Translation Studies, Management and Computer Sciences) and Strategic and Global Communication, both of which are considered inter-disciplines in and of themselves. It also borrows analytical tools and models from other neighbouring disciplines such as Multilingualism Studies, especially research on different models of institutional and corporate management of multilingualism.

The study program is predicated on the idea of a necessary integration of Liberal Arts and STEM (Science, Technology, Engineering and Mathematics) in order to educate T-shaped (and in some cases Pi-shaped) communication professionals, that is, individuals sought after not only for their in-depth knowledge in a specialized area (the vertical stroke of the T), but also for their agility and broad-based competencies and soft skills (horizontal stroke) (Gardner & Estray, 2017, p. 2). In fact, the program could serve as empirical grounds to test the applicability of the T-shaped model to the field of strategic communication/localization, where it has not yet been applied.

By combining the knowledge base of related (inter-)disciplines, we hope to contribute to the construction of a **novel transdisciplinary knowledge base**.

- An **online delivery format** that supports and enhances the learning approach will be adopted.

The new transdisciplinary knowledge base mentioned above is grounded in a collaborative, problem-based, experiential and agile learning approach, with a focus on flipped teaching strategies to fulfill adult-centred teaching needs.

Learners will be expected to work collaboratively in multidisciplinary teams through the resolution of complex problems using a hands-on approach through projects, case studies or other problem-based teaching strategies. This will allow learners to fulfill adult-centred learning needs.

The proposed online delivery format is particularly suitable to implementing the learning approach outlined above. In particular, the selected **instructor-led online learning model** consists of a variable combination of synchronous (live interactive sessions via the Zoom platform) and asynchronous (independent study time) learning activities, which allows three levels of interaction (learner-content, learner-instructor, learner-learner). Zoom users can choose to record sessions, collaborate on projects, and share or annotate on one another's screens.

The live sessions promote interaction with the instructor and among learners, reduce the feeling of isolation inherent in online learning, enable social presence, promote social creation of knowledge (social constructivism), contribute to the reinforcement of professional skills such as multidisciplinary collaboration, foster engagement and communities of practice, and align with the McGill School of Continuing Studies' preferred experiential pedagogy. The length and occurrences of live sessions will vary depending on course learning goals and outcomes, as well as teaching strategy.

Independent, facilitated study time provides flexibility to the adult learner, promoting self-regulation, deep learning and meta-learning (learning how to learn), all of which are central components of flipped learning approach.

## 4. The Proposed Curriculum

The M.Sc. (Applied) in Multilingual Digital Communication (non-thesis) is an **online** 45-credit **professional, transdisciplinary** and **cross-industry** program. It comprises three elements: a core module, a choice of two streams and a capstone experience. It is a **part-time** program that can be completed in approximately two and a half years (eight semesters). **Students are required to take two courses per term.**

### CORE MODULE (15 CREDITS)

#### Core module rationale

The core module consists of 15 credits (five three-credit courses from a choice of six) that students take at the beginning of the program. It focuses on transdisciplinary (Saviano et al. 2016, p. 435) or boundary-spanning (Gardner & Estray, 2017) competencies repeatedly identified as central in the data collected on both streams (see section 3.2). Since learners come from different backgrounds in terms of both formal education and experience, they may have already taken courses in some of these key transversal competencies, hence the choice of five out of six courses. They all focus on different facets of multilingual strategic communication: content creation (copywriting and translation), research, and the tools and processes to manage multilingual content (language technologies and project management). A course in multilingualism management completes the picture by situating these different facets of multilingual strategic communication within a larger economic and social context.

The goal of including these competencies is not only to create learning opportunities beyond the confines of pre-established disciplines, but also to level out differences in the body of knowledge and experiences acquired by the potentially diverse student population. The hope is to use the core module to initiate the interchange of the conceptual tools and terminology between two or more disciplinary traditions. Students with previous graduate coursework in more than one of the core courses may be able to request an authorized course substitution from the other program stream.

#### Course descriptions

##### **CMDC 610 – Approaches to Multilingualism Management (3 credits)**

Critical examination of the concept of multilingualism, its management and its social and economic consequences for the public and private sectors. Different models of institutional and corporate multilingualism management, as well as their effects on the language and communication industries will be analyzed. Discussion of the implications of language technology developments on multilingualism management.

##### **CMDC 612 – Copywriting (3 credits)**

Advanced copywriting techniques in English will be explored through application of the principles of copywriting for business, marketing and technical contexts. Concepts and principles of effective writing considering audience, purpose, organization and style. Planning, composing and editing business, marketing or technical copy to communicate online, such as web content (using

WordPress), blog posts, social media content for various platforms, online articles, internal/external email newsletters, plans and reports. Emphasis on reader-centred writing and the principles of plain language.

### **CMDC 614 – Digital Translation Methodology (3 credits)**

In-depth examination of the specificities of digital communication in translation. Review of research techniques and tools, as well as translation methods, strategies and procedures best suited to a variety of selected translation challenges concerning digital content. Translation exercises\* involving different text typologies and genres, ranging from the creative to the technical, each requiring varying degrees of adaptation. Meta-reflection exercises. Ethics and professional best practices are also addressed.

\*Practical translation exercises will be adapted to the students' selected language pair (French-to-English, English-to-French, English-to-Spanish or Spanish-to-English).

### **CMDC 616 – Research Methods in Professional Communication (3 credits)**

Introduction to applied research for communication and language industry professionals in a variety of business situations. Overview of research design types. Qualitative methods, with an emphasis on interviews, focus groups and usability tests, as well as quantitative methods, with an emphasis on survey research, summative benchmark studies and web analytics, including exposure to big data analytics. Examination of the fundamental aspects of data collection and data analysis (including essential statistical techniques). Overview of report writing and research ethics.

### **CMDC 618 – Language Technologies (3 credits)**

*Prereq.: Digital Translation Methodology (3 credits) or Departmental Approval*

Overview of language technologies for translation, including computer-assisted translation (CAT) tools (translation memories, terminology databases, translation and editing environments), project management systems, machine translation engines, and quality assurance and assessment tools, from single-purpose solutions to augmented translation environments. Introduction to industry standards and the role of artificial intelligence in the field of language technology. Theoretical and practical analysis of the principles of creating and managing translation memories and terminology databases. Practical exploration of translation editing environments. Introduction to translation management systems and the benefits of integrating language technology tools under one platform.

### **CMDC 620 – Project Management for Global Content (3 credits)**

*Prereq.: Language Technologies (3 credits) or Departmental Approval*

Examination of important theoretical concepts and best practices in project management, with a focus on global content management and localization. Analysis of the phases of the project management lifecycle, from conception and initiation to planning, execution, monitoring and closure, as well as project and localization management software options. In-depth analysis of the role of the project manager in a multilingual environment. Emphasis on stakeholder management, risk management and business intelligence strategies. Introduction to quality assurance frameworks and tools. The execution of a full-fledged translation or localization project will bring all the components of the course together.

## Sequence of courses

### YEAR 1 – CORE MODULE (Course offerings)

| Fall                                                               | Winter                                                                   | Spring                                                          |
|--------------------------------------------------------------------|--------------------------------------------------------------------------|-----------------------------------------------------------------|
| 1. CMDC 610 – Approaches to Multilingualism Management (3 credits) | 3. CMDC 614 – Digital Translation Methodology (3 credits)                | 5. CMDC 618 – Language Technologies (3 credits)                 |
| 2. CMDC 612 – Copywriting (3 credits)                              | 4. CMDC 616 – Research Methods in Professional Communication (3 credits) | 6. CMDC 620 – Project Management for Global Content (3 credits) |

#### Notes:

Students are highly recommended to follow the sequence indicated in the chart. Course 3 must be taken before course 5 and 6. However, students with a previous degree in Translation may request permission to take courses 5 and 6 without taking course 3.

## STREAM 1: LOCALIZED GLOBAL COMMUNICATION (18 CREDITS)

### Stream 1 rationale

The explosion of digital content and the participatory online culture have intensified the demand for translated, localized and transcreated content across multiple digital platforms (e.g. websites and social media), with a focus on the requirements of audiences in specific geographic and linguistic locales<sup>12</sup> (CSA, 2018).

For this, in-depth specialized knowledge and understanding of modern communication channels is crucial, as is knowing how to structure text and visual content for digital media (Roberts & Zahay, 2012). Knowledge of localization processes is essential in this regard. During localization, content is adapted for use in specific locales. This complex process includes translating or transcreating written, audio and visual materials, and adapting documents or software to reflect localized conventions and the most suitable digital media platform for a given market.

The proposed stream aims to address these challenges and reconcile the needs of communicating in a digital, global context with those of reaching a multilingual, multicultural audience. Needless to say, multilingual, multicultural audiences characterize both global and local contexts (such as the one found in Quebec). The purpose is twofold. First, this stream is aimed at **language** professionals, specifically translators, who have been traditionally educated to “simply” reproduce a source text in a target language. The goal is to strengthen their relevance within the digital communication industry by equipping them with the competencies needed to effectively create localized digital content based on the principles of search engine optimization (SEO) and aligned with the specificities of each digital media platform. The importance of these competencies is highlighted in the research reported in Appendix 2. The second aim is to equip **communication** professionals with specific multilingual communication and translation competencies (a dimension missing in most, if not all, comparable digital media programs in North America) to enable them to integrate localized and transcreated digital content into more general global communication strategies, including managing linguistic and cultural nuances in social media. Another aim is to equip them with knowledge about the language technologies that can enhance multilingual content management processes.

In short, this cross-training will enable both groups of learners to work with partners from other disciplines and industries, providing them with a competitive edge and helping them differentiate themselves in the market.

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<sup>12</sup> A locale is a subset of a user’s environment that defines conventions for a specified culture (Trager, 2006), which affects the representation of many concepts and objects, for instance, text representations (characters, punctuation, symbols, addresses, currency symbols, etc.), numerics (date/time, currency, telephone numbers, measures, decimal and list separators), sequencing (character sorting order, character search orders, etc.), graphics (icons, banners, colours, etc.) and sounds (type, intensity).

## Course descriptions

### **CMDC 622 – Current Trends in Digital Communication (2 credits)**

Theoretical and practical exploration of the principles, techniques and challenges of digital communication in a global context, with a focus on multilingual environments. Examination of the role of digital communication in integrated communications including advertising, public information and public relations, social media and content marketing. Review of the use of content management systems and marketing automation tools. Overview of digital communication channels and platforms, and outline of the content created for each.

### **CMDC 630 – Multilingual Desktop Publishing (3 credits)**

Introduction to software commonly used to create and localize visual digital content in multilingual contexts. Design principles and the use of various typefaces and fonts are examined and applied to create visual content. Various design software, as well as other content editing software will be reviewed. Execution of a complete DTP brief – from the initial client request to invoicing.

### **CMDC 642 – Social Media and Community Management in Multilingual Contexts (3 credits)**

Creating and adapting social media content to different locales and engaging and managing online communities in a multilingual context. Focus on developing online identity and presence, and promoting products or services or disseminating information by creating, curating and managing written and visual content on various social media platforms to promote user engagement. Overview of how to adapt content for different digital platforms and locales. The role of a community manager in building, growing and managing multilingual online communities is analyzed.

### **CMDC 644 – Multilingual Search Engine Optimization and Web Analytics (3 credits)**

Organic and paid search engine optimization (SEO) and multilingual SEO and the relevance of both for communication and language professionals working with multilingual digital content. Use of keywords and other search information to write qualified traffic-generating content. Creation of SEO-optimized content (new, localized or transcreated content) in simulated multilingual contexts. Measurement through platforms such as Google Analytics.

### **CMDC 646 – Global Digital Communication and Localization Strategies (3 credits)**

Analysis of the creation of culture-specific content localization for different locales. Concepts of globalization,<sup>13</sup> internationalization,<sup>14</sup> localization and translation (GILT) are differentiated. The study of transcreation – and when it is required as a complement to internationalization and localization – is also analyzed. Hofstede's cultural dimensions, cross-cultural issues and

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<sup>13</sup> A broad range of processes necessary to prepare and launch products and activities internationally. Sometimes written G11n, globalization is an all-encompassing concept that applies to activities such as multilingual communication, global-readiness of products and services, and processes and policies related to international trade, commerce, education and more. The language industry is concerned with several aspects of globalization, especially those that impact communication, in particular, localization, translation and interpreting, as well as the software and tools that support such endeavours (Gala, <https://www.gala-global.org/language-industry/intro-language-industry/what-globalization>).

<sup>14</sup> A design process that ensures a product (usually a software application) can be adapted to various languages and regions without requiring engineering changes to the source code. Internationalization is seen as *readiness* for localization. (Gala, <https://www.gala-global.org/language-industry/intro-language-industry/what-internationalization>).



technology-related dilemmas are examined to learn how to develop a global communication strategy that incorporates localization.

### **CMDC 650 – Multilingual Content Management in Enterprise Solutions (2 credits)**

Overview of multilingual content structuring approaches in enterprise solutions and their impact on localization and translation processes. Review of content storage and extraction for translation in a selection of enterprise systems such as content management systems, web content management systems, product information management systems, and e-learning and e-commerce platforms. Examination of benefits of integrating enterprise solutions and translation management systems to automate content extraction and integration, and review of key factors to assess feasibility.

### **CMDC 652 – Transcreation Lab (2 credits)**

*Prereq.: Multilingual Desktop Publishing (3 credits) and Multilingual Search Engine Optimization and Web Analytics (3 credits)*

A detailed examination of the specificities of the transcreation process, including SEO keyword research, the transcreation client brief and the quoting process for transcreation projects. Execution of a full-fledged transcreation project\* for a product or brand.

\*Students will work in their chosen language pair(s).

## **Sequence of courses**

### **YEAR 2 – STREAM 1 (Course offerings)**

| <b>Fall</b>                                                       | <b>Winter</b>                                                                            | <b>Spring</b>                                                                      |
|-------------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| 1. CMDC 622 – Current Trends in Digital Communication (2 credits) | 3. CMDC 642 – Social Media and Community Management in Multilingual Contexts (3 credits) | 5. CMDC 646 – Global Digital Communication and Localization Strategies (3 credits) |
|                                                                   |                                                                                          | 6. CMDC 650 – Multilingual Content Management in Enterprise Solutions (2 credits)  |
| 2. CMDC 630 – Multilingual Desktop Publishing (3 credits)         | 4. CMDC 644 – Multilingual Search Engine Optimization and Web Analytics (3 credits)      | 7. CMDC 652 – Transcreation Lab (2 credits)                                        |

### **Notes:**

Students are highly recommended to follow the sequence indicated in the chart. Students must take course 2 and 4 before taking course 7.

## STREAM 2: MULTILINGUAL COMMUNICATION TECHNOLOGIES (18 CREDITS)

### Stream 2 rationale

As companies move up the localization maturity model (DePalma, 2006), the need to not only use but also optimize the management of translation memories, translation editing environments, quality assurance tools, translation management systems, machine translation engines and multilingual content management systems grows at a staggering pace and trickles over from language services into overall company processes. The more the field of language technology evolves and the higher companies climb up the localization maturity model, the more the industry requires professionals with advanced language technology management competencies.

Against this backdrop, the goal of this stream goes beyond equipping language professionals to critically use these evolving language technologies (the stated goal of most competing programs). Rather, it aims to prepare versatile expert users who will be able to lead the optimization of multilingual content management processes, as well as evaluate and select the best solutions and tools. Language professionals with these (emerging) profiles will in fact be well positioned to bridge the gap between users (i.e. translators, interpreters, editors, terminologists and project managers) and management, sales and technology development teams, and language service clients.

Of special interest is the rise of machine translation technology and the ever-growing number of artificial intelligence applications for the language industry. Beyond post-editing<sup>15</sup> and data collection for machine training, language professionals with advanced knowledge in the history, nature, analytical tools, types and applications of machine translation technology and artificial intelligence applications, as well as in-depth knowledge of research in this area, will be better equipped to guide language service teams in how to best evaluate, select and adopt these technologies. Moreover, their competencies will allow them to provide feedback and assist development teams in optimizing, training and adapting these technologies to accommodate the needs of different organizations or projects.

### Course descriptions

#### **CMDC 623 – Artificial Intelligence in Multilingual Communication (3 credits)**

Introduction to artificial intelligence (AI) and its applications, with the goal of understanding core AI concepts (e.g. machine learning, deep learning, big data, algorithm-based decision making). How algorithm correctness is attained and how language technology experts can evaluate algorithm bias and contribute to adjusting and optimizing AI applications. Overview of current AI applications in multilingual communication and analysis of the applicability of current developments, as well as their impact on the language industry, society and the human-machine experience.

<sup>15</sup> The process by which humans review, edit and improve the quality and usefulness of machine translation output to meet specific quality targets ("Post-Editing Goes Mainstream"). (CSA, 2018, p. 24).

**CMDC 630 – Multilingual Desktop Publishing (3 credits)**

Introduction to software commonly used to create and localize visual digital content in multilingual contexts. Design principles and the use of various typefaces and fonts are examined and applied to create visual content. Various design software, as well as other content editing software will be reviewed. Execution of a complete DTP brief – from the initial client request to invoicing.

**CMDC 643 – Technical Writing (2 credits)**

Best practices and principles in technical writing, including document design. Application to technical writing/communication genres, including product descriptions and specifications, end-user instructions, how-to and troubleshooting guides, user acceptance tests, standard operating procedures, technical reports and white papers.

**CMDC 645 – Advanced Language Technologies: Evaluation and Implementation (3 credits)**

*Prereq.: Language Technologies (3 credits)*

In-depth examination of computer-assisted translation tools and translation management systems beyond core functionalities, delving into the advanced features that distinguish these systems. Empirical comparative research on language technologies and evaluation methods explored via practical exercises on the best tool, asset and system configuration selection, including IT infrastructure factors. Introduction to software implementation methodologies adapted to language technologies. The key concepts of business analysis and overview of various language technology implementation plans, main risks and mitigation measures, including change management.

**CMDC 647 – Machine Translation and Post-Editing (3 credits)**

*Prereq.: Artificial Intelligence in Multilingual Communication (3 credits)*

Review of literature on machine translation research, along with its history, status, strengths, limitations, best-suited scenarios and impact on both the language industry and society at large. Examination of selected machine translation engines (linguistic, statistical, neural), including engine customization options (e.g. glossaries, machine learning, rule adaptation). Review of the literature on the nature, techniques and best practices associated with machine translation post-editing and application of post-editing techniques using a variety of document types and machine translation engines. Machine translation evaluation metrics are used to assess the benefits of machine translation in a given scenario.

**CMDC 650 – Multilingual Content Management in Enterprise Solutions (2 credits)**

Overview of multilingual content structuring approaches in enterprise solutions and their impact on localization and translation processes. Review of content storage and extraction for translation in a selection of enterprise systems such as content management systems, web content management systems, product information management systems, and e-learning and e-commerce platforms. Examination of benefits of integrating enterprise solutions and translation management systems to automate content extraction and integration, and review of key factors to assess feasibility.

**CMDC 653 – Data Structure for Language Professionals (2 credits)**

Localization and internationalization core concepts, processes and best practices as a background to the implications of common data-related pitfalls (e.g. in encoding, multi-byte characters, text directionality, text extraction and file format conversion). File pre- and post-processing, specifications and validation tools, with an emphasis on tagged files (e.g. XML, HTML), industry standards (e.g. XLIFF, TMX, TBX) and advanced desktop publishing formats, as well as file manipulation strategies (e.g. regular expressions, file converters, macros, scripts, basic database queries).

**Sequence of courses****YEAR 2 – STREAM 2 (Course offerings)**

| <b>Fall</b>                                                                     | <b>Winter</b>                                                                           | <b>Spring</b>                                                                     |
|---------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 1. CMDC 623 – Artificial Intelligence in Multilingual Communication (3 credits) | 3. CMDC 643 – Technical Writing (2 credits)                                             | 5. CMDC 647 – Machine Translation and Post-Editing (3 credits)                    |
|                                                                                 |                                                                                         | 6. CMDC 650 – Multilingual Content Management in Enterprise Solutions (2 credits) |
| 2. CMDC 630 – Multilingual Desktop Publishing (3 credits)                       | 4. CMDC 645 – Advanced Language Technologies: Evaluation and Implementation (3 credits) | 7. CMDC 653 – Data Structure for Language Professionals (2 credits)               |

**Notes:**

Language Technologies (from Year 1), must be taken before course 4. Course 1 should be taken before course 5.

## CAPSTONE EXPERIENCE (12 CREDITS)

The capstone experience aims to bring all the components of the program together. Students will work with companies, government agencies, non-governmental organizations or, in some cases, faculty at McGill or other academic institutions in the context of a capstone experience directly related to the stream of their choice. Capstone experiences may consist of 1) a work-integrated learning experience (in the form of a practicum<sup>16</sup> or internship<sup>17</sup> either remote or face-to-face) or 2) an applied research project.<sup>18</sup>

12 credits chosen from the following:

### **CMDC 694 – Practicum 1 (6 credits)**

Supervised non-research project in the student's stream of choice. Supervised by faculty and/or external partner.

### **CMDC 695 – Practicum 2 (6 credits)**

See Practicum 1. Supervised non-research project in the student's stream of choice. Supervised by faculty and/or external partner.

\*Practicum 2 can be taken after or at the same time as Practicum 1. If taken simultaneously with Practicum 1, Practicum 2 should be an extension of Practicum 1 (i.e. a larger project instead of two different projects).<sup>19</sup>

**OR**

### **CMDC 696 – Internship 1 (6 credits)**

In-person or remote work directed by a qualified professional in the internship setting and supervised by a faculty member.

### **CMDC 697 – Internship 2 (6 credits)**

See Internship 1. In-person or remote work directed by a qualified professional in the internship setting and supervised by a faculty member.

\*Internship 2 can be taken after or at the same time as Internship 1. If taken simultaneously with Internship 1, Internship 2 should be done with the same client/partner.

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<sup>16</sup> In a practicum, the learner works independently on a well-defined non-research project. The project can be supervised by an external partner and/or a faculty member.

<sup>17</sup> In the internship, the learner is immersed in a work environment and is part of a team. It is a task-based component (rather than project-based). She or he may be involved in more than one project. Faculty supervision and direction by personnel in the internship setting.

<sup>18</sup> In an applied research project, the learner is expected to conduct applied empirical research to explore and analyze an area of interest relevant to the selected stream and submit the results in the form of a research report or a publication. Supervision by faculty and/or external industry experts/academics. International students wanting to complete their capstone experience in Canada will need 12 credits to be considered full-time students. Therefore, they will be able to complete the 12 credits in one semester.

OR

**CMDC 698 – Applied Research Project 1 (6 credits)**

Preparation of applied research proposal and start of research under supervision of a faculty member. Collaboration with an industry partner is optional, but highly recommended.

**CMDC 699 – Applied Research Project 2 (6 credits)**

See Applied Research Project 1. Completion of research project. Submission of research project findings to the supervising industry partner or submission for publication is optional, but desirable.

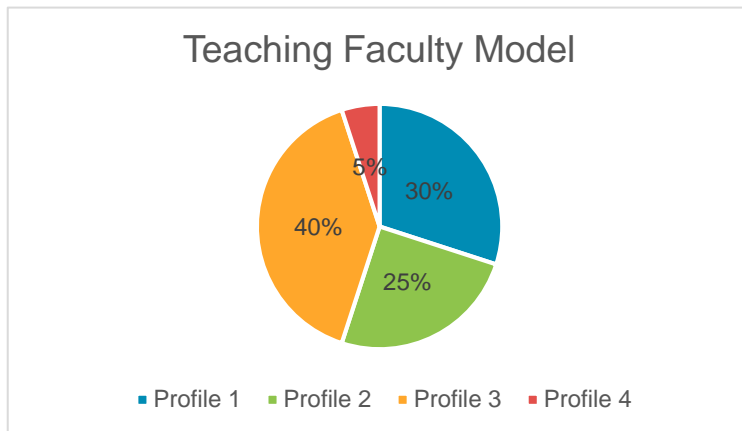
\*Applied Research Project 2 can be taken after or at the same time as Applied Research Project 1.

**Sequence of courses**

**YEAR 3 – CAPSTONE EXPERIENCE (Course offerings)**

| Fall                                                                                                                                                                                                                                                                                       | Winter                                                                                                                                                                                                                                                                                     | Spring      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| Choice of:<br>CMDC 694 – Practicum 1 (6 credits)<br>CMDC 695 – Practicum 2 (6 credits)<br>OR<br>CMDC 696 – Internship 1 (6 credits)<br>CMDC 697 – Internship 2 (6 credits)<br>OR<br>CMDC 698 – Applied Research Project 1 (6 credits)<br>CMDC 699 – Applied Research Project 2 (6 credits) | Choice of:<br>CMDC 694 – Practicum 1 (6 credits)<br>CMDC 695 – Practicum 2 (6 credits)<br>OR<br>CMDC 696 – Internship 1 (6 credits)<br>CMDC 697 – Internship 2 (6 credits)<br>OR<br>CMDC 698 – Applied Research Project 1 (6 credits)<br>CMDC 699 – Applied Research Project 2 (6 credits) | not offered |

## 5. Teaching Faculty Model



**Profile 1:** SCS Scholar-practitioners (CAS assistant/associate/full professors)

**Profile 2:** Tenure-track faculty who remain current in the industry (McGill professors or adjunct professors)

**Profile 3:** High caliber practitioners who hold prominent industry positions

**Profile 4:** McGill Postdoc students

Please see **Appendix 7**, which includes a possible list of course assignments (to be confirmed).

## Bibliography

- Bridgstock, R. (2015). "KEY-shaped people, not T-shaped people – disciplinary agility and 21st century work". Retrieved from <http://www.futurecapable.com/?p=102>
- Chaffey, D., & Smith, P. R. (2013). *Emarketing Excellence: Planning and Optimizing your Digital Marketing* (4th ed.). London and New York: Routledge.
- Common Sense Advisory (2019). The Largest Language Service Providers: 2019. Retrieved from <https://csa-research.com/More/Global-Market-Study/Top-100-LSPs>
- Common Sense Advisory (2018). *The Language Services Market*, CSA.
- Common Sense Advisory (2017). *The Language Services Market*, CSA.
- DePalma, D. (2006, November 30). Localization Maturity Model. Retrieved from <https://www.gala-global.org/publications/localization-maturity-model-0>.
- Gardner, P., & Estray, D. (2017). A Primer on the T-professional. *Michigan State University, East Lansing, MI*, 1-36. Retrieved August 1, 2019 from <http://www.ceri.msu.edu/wp-content/uploads/2018/03/Primer-on-the-T-professional.pdf>.
- Gilbane Group (2009, June). Multilingual Product Content: Transforming Traditional Practices into Global Content Value Chains. Retrieved from [https://www.vasont.com/sites/default/files/case\\_studies/gilbane-gpcs-report-oct09.pdf](https://www.vasont.com/sites/default/files/case_studies/gilbane-gpcs-report-oct09.pdf).
- Government of Canada (2019). Dashboard on the status of the language of work recommendations. <https://www.noslangues-ourlanguages.gc.ca/en/ressources-resources/tableau-de-bord-dashboard-eng#recommendation1>
- Grin, F. (2017). Translation and language policy in the dynamics of multilingualism. *International Journal of the Sociology of Language*, 2017 (243), 155-181. Doi: 10.1515/ijsl-2016-0051



- Guest, D. (1991, September 17). The hunt is on for the renaissance man of computing. *Independent [London]*.
- Iansiti, M. (1993). Real world R & D: Jumping the product generation gap. *Harvard Business Review*, (May/June), 139.
- Karjalainen, T-M. & Koria, M. & Salimäki, M. (2009). Educating T-shaped Design, Business and Engineering Professionals. Competitive Design - Proceedings of the 19th CIRP Design Conference. Retrieved from [https://www.researchgate.net/publication/228952020\\_Educating\\_T-shaped\\_Design\\_Business\\_and\\_Engineering\\_Professionals](https://www.researchgate.net/publication/228952020_Educating_T-shaped_Design_Business_and_Engineering_Professionals)
- Kumar, B. (2017, June 8). Why Community Management Matters For Your Business (And How to Do It Right). Retrieved from <https://www.shopify.ca/blog/community-management>
- Lommel, A. (2017, January 18). Neural Machine Translation: Sorting Fact from Fiction. *Common Sense Advisory*.
- McMillan, E. (2008). *Complexity, management and the dynamics of change: Challenges for practice*. London: Routledge.
- Pielmeier, H. (2017, December 13). The Journey to Project Management Automation. Retrieved September 1, 2018 from <https://csa-research.com/Insights/ArticleID/169/The-Journey-to-Project-Management-Automation>
- PricewaterhouseCoopers (2012). *Translation Bureau benchmarking and comparative analysis: Final Report*. Ottawa, PricewaterhouseCoopers.
- Pym, A. (in press). How automation through neural machine translation might change the skill sets of translators. Retrieved September 1, 2019 from

[https://www.academia.edu/40200406/How automation through neural machine translation might change the skill sets of translators](https://www.academia.edu/40200406/How_automation_through_neural_machine_translation_might_change_the_skill_sets_of_translators)

Ray, R. (2017, May 10). Benchmark Your Globalization Journey Using Localization Maturity Model 3.0.

Retrieved from <https://csa-research.com/Insights/ArticleID/183/Benchmark-Your-Globalization-Journey-Using-Localization-Maturity-Model-3-0>

Roberts, M. L., & Zahay, D. (2012). *Internet marketing: Integrating online and offline strategies* (3rd ed.). USA: Cengage Learning.

Saviano, M., Polese, F., Caputo, F., & Walletzký, L. (2016, December). A T-shaped model for rethinking higher education programs. In *Toulon-Verona Conference "Excellence in Services"*. Retrieved September 1, 2019 from [https://www.researchgate.net/publication/315753642\\_A\\_T-shaped\\_model\\_for\\_rethinking\\_higher\\_education\\_programs](https://www.researchgate.net/publication/315753642_A_T-shaped_model_for_rethinking_higher_education_programs)

Trager, Edward H. (2006). *International Text Layout & Typography: The Big and Future Picture*.

Retrieved <https://www.unifont.org/textlayout/TheBigPicture.pdf>

# Appendix 1 to 4

**Available upon request (includes details about market research, data collection and interview findings)**

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# Appendix 5

**Sample of 100% fully online masters in prominent  
English-speaking universities**

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## 1) Canada

### **UBC**

- ✓ Master of Educational Technology
- ✓ Master in Home Economics Education
- ✓ Master of Early Childhood Education
- ✓ Master of Modern Languages/French Immersion
- ✓ Master in Adult Learning and Global Change
- ✓ Masters in Fine Arts in Creative Writing
- ✓ Master of Rehabilitation Science program

### **University of Alberta**

- ✓ Master of Education
- ✓ Master of Library & Information Studies

### **Queen's University**

- ✓ Professional Master's in Education

+ two masters with a significant online component (online coursework, but two in person residential sessions):

- ✓ Master of Science in Healthcare Quality
- ✓ Master Degree in Earth and Energy Resources Leadership

## 2) Outside Canada

### **Columbia University**

- ✓ M.A. in Computing in Education
- ✓ M.Sc. in Diabetes Education and Management
- ✓ M.Sc. in Computer Science Electrical Engineering
- ✓ M.Sc. in Engineering and Management Systems
- ✓ M.Sc. in Material Science
- ✓ M.Sc. in Mechanical Engineering

### **Imperial College London**

- ✓ M.Sc. in Business Analytics
- ✓ MBA
- ✓ Global Master of Public Health

### **John Hopkins**

- ✓ Doctor of Education
- ✓ Master of Education in the Health Professions (MEHP)
- ✓ Master of Science in Education with a concentration in Educational Studies collaboration programs with: Teach For America/TNTP

- ✓ Master of Science in Organizational Leadership
- ✓ Master of Science in Education with a concentration in Digital Age Learning and Educational Technology
- ✓ Master of Science in Gifted Education
- ✓ 20 masters with a significant online component  
(<https://advanced.jhu.edu/academics/online-programs/>)

#### **King's College London**

- ✓ M.Sc. Applied Neuroscience
- ✓ M.Sc. Global Finance and Banking
- ✓ M.Sc. International Affairs
- ✓ M.Sc. Marketing
- ✓ M.Sc. Psychology and Psychology of Mental Health
- ✓ M.Sc. Public Health
- ✓ International Commercial and Corporative Law, LLM
- ✓ International Commercial and Corporative Law, LLM

#### **Monash University**

- ✓ Master of Health Administration
- ✓ Master of Public Health

#### **National University of Australia**

- ✓ Master of Applied Anthropology and Participatory Development
- ✓ Master of Environmental Management and Development
- ✓ Master of Culture Health and Medicine
- ✓ Master of Public Health

#### **New York University (NYU)**

- ✓ 20 masters in fields as varied as Bioinformatics, Cybersecurity, Translation, Counseling, Health Administration, American Journalism, to name a few (for a comprehensive list: <https://www.nyu.edu/academics/nyu-online/growing-online-offerings/online-degrees.html>)
- ✓ 1 Ph.d. and 1 Ed (<https://www.nyu.edu/academics/nyu-online/growing-online-offerings/online-degrees.html>)

#### **Northwestern**

- ✓ MS in Data Science (formerly Predictive Analytics)
- ✓ MS in Global Health
- ✓ MS in Health Analytics
- ✓ MS in Health Informatics
- ✓ MS in Information Design and Strategy
- ✓ MS in Information Systems
- ✓ MA in Public Policy and Administration

- ✓ MS in Regulatory Compliance
- ✓ MS in Sports Administration
- ✓ MS in Integrated Marketing Communications
- ✓ MS in Health Informatics
- ✓ MA in Counseling

#### **Stanford**

- ✓ M.Sc. in Chemical Engineering  
(There are additional masters with a significant online component)

#### **University College London (UCL)**

- ✓ M.Sc. in Crime Science
- ✓ MSc in Sports Medicine, Exercise and Health

#### **University of Edinburgh**

- ✓ 70 online masters  
(<https://www.ed.ac.uk/studying/postgraduate/degrees/index.php?r=site/online&edition=2020>)

### **Masters in prestigious English-speaking universities with a significant online component (approx. 80% of the curriculum)**

#### **Harvard**

- ✓ Master of Liberal Arts in 20 fields offered through the Harvard Extension School.  
One course on campus is expected  
(<https://www.extension.harvard.edu/academics/graduate-degrees>)

#### **University of Oxford (Offered through the Department of Continuing Education)**

- ✓ Master of Studies in International Human Rights Law
- ✓ Master of Studies in Literature and Arts
- ✓ Master of Studies in Practical Ethics

The programs features “a significant component of online and distance learning, as well as one week of intensive teaching in Oxford per module”.

# Appendix 6

## Sample of other peer (particularly R1 and U15) institutions whose Continuing Education Units offer graduate degrees

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- University of Alberta's Faculty of Extension offers two master's degrees:  
<https://www.ualberta.ca/extension/graduate-studies>.
  - Columbia University's School of Professional Studies: 17 master's degrees (16 M.Sc. programs including an M.Sc. in Strategic Communications)
  - University of Chicago's Graham School of Continuing Liberal and Professional Studies: 4 master's degrees (3 M.Sc. programs and 1 M.A.)
  - NYU's School of Professional Studies: 20 master's degrees (all M.Sc. programs, including Translation)
  - University of Pennsylvania's College of Liberal and Professional Studies: 10 master's degrees, each of which has a specific designation related to its respective field of study
  - Georgetown University's School of Continuing Studies: 6 masters of professional studies
  - Brown University's School of Professional Studies: 4 executive master's degrees
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# Appendix 7

**Possible list of course assignments (to be confirmed)**

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## Possible list of course assignments (to be confirmed)



N.B. The CAPSTONE EXPERIENCE will be a collaborative teaching endeavour shared by CAS + tenure-stream faculty