



FOR APPROVAL

PUBLIC

OPEN SESSION

TO: Academic Affairs Committee

SPONSOR: Amrita Daniere, Vice-Principal Academic and Dean
CONTACT INFO: 905-828-3719, vpdean.utm@utoronto.ca

PRESENTER: Professor Shashi Kant, Director, MScSM
CONTACT INFO: 905-569-5739

DATE: February 4, 2020 for February 11, 2020

AGENDA ITEM: 6

ITEM IDENTIFICATION:

Minor Modification: Master of Science in Sustainability Management (MScSM): Program & Curriculum Changes

JURISDICTIONAL INFORMATION:

Under section 5.6 of its terms of reference, the Academic Affairs Committee is responsible for major and minor modifications to existing programs and has responsibility for approving amendments to admission policies that are not of major significance to the entire Campus.

GOVERNANCE PATH:

- 1. Academic Affairs Committee [For Approval] (February 11, 2020)**

PREVIOUS ACTION TAKEN:

No previous action in governance has been taken on this proposal.

HIGHLIGHTS:

The Master of Science in Sustainability Management (MScSM) Program is a professional graduate masters program offered through the Institute for Management & Innovation (IMI) at the University of Toronto Mississauga (UTM). This course-based program aims to provide a strong foundation, including hands-on work experience, in sustainability management for both the private and public sectors. In July 2019, the MScSM Program conducted an informal curriculum review, which yielded a set of recommendations to help the Program provide more flexibility and autonomy to students while maintaining relevancy within the sustainability management profession. The MScSM Program is currently seeking approval of the following minor modifications to address these recommendations:

1. **Change to an Existing Course – SSM1100Y, Research Paper.** This course will be renamed Research Paper I to reflect the addition of a second Research Paper in the Program. Its focus will shift to address the research skills and techniques unique to students completing the science concentration of the MScSM Program.
2. **Introduction of a New Graduate Course – SSM1120H, Social Dimensions of Sustainability.** While MScSM students are exposed to aspects of social sustainability through existing courses, there is no course dedicated to this area. SSM1120H will fill this gap, providing increased breadth and depth of knowledge, enhanced awareness of the limits of their own knowledge in this area, and an appreciation for their personal and professional development, among other things. This course will become a program requirement for all MScSM students.
3. **Introduction of a New Graduate Course – SSM1101Y, Research Paper II.** This course will serve as a complement to the existing SSM1100Y, Research Paper, course but is specifically designed for MScSM students in the management/ social science concentration. Like its SSM1100Y counterpart, this course will develop and strengthen basic research and communication skills but with its management/ social science focus, it will be able to address the unique techniques and considerations specific to research in this sub-area. MScSM students will be required to complete the Research Paper course designed for their choice of program concentration (science or management/ social science).
4. **Introduction of a New Graduate Course – SSM2050H, Special Topics in Sustainability.** This new elective course will provide flexibility for the Program and its students, allowing them to explore new and current advancements in the field. Such opportunities will further broaden a student's autonomy and professional development, improving employment opportunities after graduation.
5. **Program Requirement Changes** – A reduction of the number of elective credits required for program completion to accommodate the new required course, Social Dimensions of Sustainability.

Consultation was sought from current MScSM students, alumni, faculty, employers, and industry experts during the July 2019 curriculum review. Their feedback has been incorporated into each proposal. All proposals were further reviewed by the IMI Curriculum Committee on January 10, 2020 and received full support.

FINANCIAL IMPLICATIONS:

There are no net implications for the campus' operating budget.

RECOMMENDATION:

Be it Resolved,

THAT the course changes and new courses proposed by the Master of Science in Sustainability Management Program, offered by the Institute for Management and Innovation (IMI), recommended by the Vice-Principal Academic & Dean, Professor Amrita Daniere, and described in the proposals dated January 20, 2020, be approved, effective on September 1, 2020.

Be it Resolved,

THAT the program requirement changes as proposed by the Master of Science in Sustainability Management Program, offered by the Institute for Management & Innovation, recommended by the Vice-Principal Academic and Dean, Professor Amrita Daniere, and described in the proposal dated January 20, 2020, be approved, effective September 1, 2020.

DOCUMENTATION PROVIDED:

Minor Modification Proposal: New Graduate Course (SSM1100)

Minor Modification Proposal: New Graduate Course (SSM1120)

Minor Modification Proposal: New Graduate Course (SSM1101)

Minor Modification Proposal: New Graduate Course (SSM2050)

Minor Modification Proposal: Change to an Existing Graduate Program



University of Toronto Minor Modification Proposal: New Graduate Courses or Changes to Existing Graduate Courses

This template should be used to: create a new graduate course; reactivate a closed/deactivated course; rename an existing course; renumber an existing course; etc.

If you have questions while you are filling out this document, please contact your Dean's Office.

Graduate Department/Unit/Centre/Institute	Institute for Management & Innovation (IMI)
Faculty/academic division	University of Toronto Mississauga (UTM)
Dean's Office contact	Yen Du Program & Curriculum Officer Yen.du@utoronto.ca Lori Innes Program & Curriculum Assistant Lori.innes@utoronto.ca

Part 1: ROSI

Please complete this section. The data will be used to complete the ROSI record.

Or Changes to an Existing Course fill out applicable fields	
Current course designator and number (required) (e.g., HIS 5XXXH)	SSM1100Y
Deactivated course designator, number and weight (e.g., HIS 5XXXH)	
Splitting or amalgamating courses (list course designators, numbers and weights)	
New designator and number (e.g., HIS 5XXXH)	
New/renamed full course title for transcript (max 60 characters)	Research Paper I
New/renamed abbreviated title (max 30 characters)	Research Paper
New FCE weight of an elective course (e.g., 0.5, 1.0)	
Change to grading scale (from letter grades to CR/NCR or vice versa)	
Change to course type (from regular to continuous, modular, extended, etc.)	

Effective Date

Required Field—Effective date must be September 1, January 1 or May 1 and not retroactive.

September 1, 2020

Part 2: Other Changes to Existing Courses

Optional Field—This section may be used to describe other types of changes to existing courses your Faculty/Division tracks.

Current Course Exclusions: None

Proposed Course Exclusions: SSM1101Y

Part 3: Change in Course Documentation

For Faculty/Divisional approval of new courses, please append the approved course documentation, or complete the template below.

Change in Course Description

The course focuses on the applications of science to sustainability. The course starts with introductory lectures on research, research methods, writing a research paper, and presenting a research paper focused on applications of science to sustainability. After that, every student works on his/her research paper under the supervision of faculty mentor(s), but the schedule of the course is same for every student. Each student will select the topic of the research paper and their faculty mentor(s). The research paper may be a review paper, an internship-based paper, a research paper based on primary or secondary data, or a sustainability-focused model. The research paper demonstrates scholarly and professional competence, an understanding of the literature in the research area, and relevant current practices in the topic area of the research paper.

Academic Rationale

The Master of Science in Sustainability Management (MScSM) program is a course-based professional program, and offers two concentrations – science and management. Students will select their electives as per their concentrations, and the choice of electives offers an opportunity to develop specialized skills in an area of their interest. The Research Paper course provides an opportunity to develop and strengthen their research skills and an additional opportunity to have specialized knowledge in the area of their research paper.

Currently MScSM offers one Research Paper course, SSM1100Y, for all students in the program but this setup has faced difficulties in course delivery as basic concepts, research methods (i.e. data collection, data analysis, etc.), and writing and presentation skills differ slightly between the research papers focused on applications of science and application of social science and management to sustainability. Separate courses are needed to address the unique techniques and considerations of research in these two fields. This proposal amends

the existing SSM1100Y Research Paper course (new name, updated course exclusion, updated course description) to accommodate the new research paper course for students interested in research papers focused on the applications of social science and management to sustainability, SSM1101Y. This existing SSM1100Y course will focus specifically on the applications of science to sustainability to hone their skills and expertise even further. MScSM students will be required to take one of two research paper courses depending on their research interests - SSM1100Y Research Paper I (focused on science) or SSM1101Y Research Paper II (focused on social science and management).

Learning Outcomes (if applicable)

No changes to existing course learning outcomes.

Similarity/Overlap With Other Courses & Consultation

SSM1101Y will list SSM1100Y as a course exclusion as both courses cover the same topics (from complimentary perspectives), have the same format, as well as the same learning objectives.

Resource Requirements (if required)

No changes to current resource requirements for this course.

Governance Approval

Unit Sign-Off	IMI Graduate Curriculum Committee January 10, 2020
Dean's Office Sign-Off	Heather Miller, Vice-Dean Teaching & Learning January 20, 2020
Faculty/Division Council	UTM Academic Affairs Committee



University of Toronto Minor Modification Proposal: New Graduate Courses or Changes to Existing Graduate Courses

This template should be used to: create a new graduate course; reactivate a closed/deactivated course; rename an existing course; renumber an existing course; etc.

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Graduate Department/Unit/Centre/Institute For courses offered by collaborative specializations, list supporting unit.	Institute for Management & Innovation (IMI)
Faculty/academic division	University of Toronto Mississauga (UTM)
Dean’s Office contact	Yen Du Program & Curriculum Officer yen.du@utoronto.ca Lori Innes Program & Curriculum Assistant lori.innes@utoronto.ca

Part 1: ROSI

Please complete this section. The data will be used to complete the ROSI record.

New Course—fill out all fields	
Course designator and number (e.g., HIS 5XXXH)	SSM1120H
FCE weight (e.g., 0.5, 1.0)	0.5
Full course title for transcript (max 60 characters)	Social Dimensions of Sustainability
Abbreviated title (max 30 characters)	Social Sustainability
Available via Student Web Services (yes or no)	Yes
Course type (regular, modular, continuous or extended)	Regular
Evaluate* function in ROSI used by unit (yes or no) *university’s online course evaluation system	Yes
Online course (yes or no)	No
Required course (yes or no)	Yes
Grading scale (letter grades or CR/NCR)	Letter
Course prerequisites; if yes, please list (e.g., HIS 5XXXH)	No
Course credit exclusions; if yes, please list	No

(e.g., HIS 5XXXH)	
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Effective Date

Required Field—Effective date must be September 1, January 1 or May 1 and not retroactive.

September 1, 2020

Part 2: Other Changes to Existing Courses

Optional Field—This section may be used to describe other types of changes to existing courses your Faculty/Division tracks. These changes are not posted to the GCT.

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Part 3: New Course Documentation

For Faculty/Divisional approval of new courses, please append the approved course documentation, or complete the template below.

Course Description

<p>This course is focussed on studying and understanding human-nature interactions, and the social processes that shape and threaten the natural world. The course will focus on the following question: how is sustainability a profoundly social challenge? Students will be challenged to gain a better understanding of the interrelationship between social problems and environmental problems, as well as the ways that humans themselves are part of nature. Students will be asked to consider how social scientific insights can inform and improve sustainability efforts. The course will cover topics such as the social construction of nature, the political economy of environmental destruction, environmental inequalities and injustices (including Global North-Global South relations), corporate projects to address social sustainability (as well as critiques of greenwashing), public engagements with environmental science, consumer politics and green identities, the politics of climate change and environmental knowledge production, as well as environmental activism and varied initiatives to address sustainability, such as green jobs programs.</p>

Academic Rationale

<p>Sustainability is defined by its three pillars – environmental, social, and economic. In the MScSM program, students are exposed to aspects of social sustainability through existing courses but there is no course focused on in-depth analysis of social dimensions of sustainability. This required course will fill this gap in the MScSM Program.</p>

The course will make positive contributions and enhance many learning outcomes of the program including: (i) identifying and evaluating the three pillars of economic, environmental and social sustainability; (ii) transform existing ecological and environmental problems faced by businesses into opportunities through building value and balancing financial, environmental, and social performance; and (iii) exercising an analytical and systems-thinking approach to critically evaluate operational decisions internal and external to an organization for its impact on society and the natural environment.

This course will also improve employment opportunities of graduates as the topic of social dimensions of sustainability has been identified by employers as a gap in our current curriculum (from our July 2019 curriculum review).

Learning Outcomes

By the end of this course, students should be able to:

- a) Demonstrate a general knowledge and understanding of the social dimensions of sustainability;
- b) Identify and critically evaluate social causes and consequences of environmental problems; with particular emphasis on recognizing the appropriate solution(s) that can be applied in various settings; and
- c) Assess the efficacy with which various actors (e.g., states, citizens, social movements, corporations) seek to address environmental problems, and evaluate the strengths of various approaches (e.g., market approaches, state efforts, civil society) to promote sustainability.

Case analysis, scenario analysis, and debates will be used in addition to regular tests and examinations to assess students learning outcomes.

Similarity/Overlap With Other Courses & Consultation

No overlap with any existing graduate courses.

Consultation occurred with students, faculty, alumni, employers, and industry experts at a recent curriculum review in July 2019. All proponents were in favour of the proposed new course.

Resource Requirements

The course will be taught by existing faculty members either on load or overload. In the case of overload teaching, the stipend will be paid at the MScSM overload rate.

Other course requirements include the standard requests for classroom space, a/v equipment and support, etc., that is part of normal course offerings.

Governance Approval

Unit Sign-Off	IMI Graduate Curriculum Committee January 10, 2020
Dean's Office Sign-Off	Heather Miller, Vice-Dean Teaching & Learning January 20, 2020
Faculty/Division Council	UTM Academic Affairs Committee



University of Toronto Minor Modification Proposal: New Graduate Courses or Changes to Existing Graduate Courses

This template should be used to: create a new graduate course; reactivate a closed/deactivated course; rename an existing course; renumber an existing course; etc.

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Graduate Department/Unit/Centre/Institute For courses offered by collaborative specializations, list supporting unit.	Institute for Management & Innovation (IMI)
Faculty/academic division	University of Toronto Mississauga (UTM)
Dean’s Office contact	Yen Du Program & Curriculum Officer yen.du@utoronto.ca Lori Innes Program & Curriculum Assistant lori.innes@utoronto.ca

Note: New Course Part 1: ROSI

Please complete this section. The data will be used to complete the ROSI record.

New Course—fill out all fields	
Course designator and number (e.g., HIS 5XXXH)	SSM1101Y
FCE weight (e.g., 0.5, 1.0)	1.0
Full course title for transcript (max 60 characters)	Research Paper II
Abbreviated title (max 30 characters)	Research Paper
Available via Student Web Services (yes or no)	Yes
Course type (regular, modular, continuous or extended)	Regular
Evaluate* function in ROSI used by unit (yes or no) *university’s online course evaluation system	Yes
Online course (yes or no)	No
Required course (yes or no)	Yes (One of two Research Paper courses is required – SSM1100Y or SSM1101Y)
Grading scale (letter grades or CR/NCR)	Letter

Course prerequisites; if yes, please list (e.g., HIS 5XXXH)	No
Course credit exclusions; if yes, please list (e.g., HIS 5XXXH)	SSM1100 Y

Effective Date

Required Field—Effective date must be September 1, January 1 or May 1 and not retroactive.

September 1, 2020

Part 2: Other Changes to Existing Courses

Optional Field—This section may be used to describe other types of changes to existing courses your Faculty/Division tracks. These changes are not posted to the GCT.

NA

Part 3: New Course Documentation

For Faculty/Divisional approval of new courses, please append the approved course documentation, or complete the template below.

Course Description:

<p>The course focuses on the applications of social science and management to sustainability. The course starts with introductory lectures on research, research methods, writing a research paper, and presenting a research paper focused on the applications of social science and management to sustainability. After that, every student works on his/her research paper under the supervision of faculty mentor(s), but the schedule of the course is same for every student. Each student will select the topic of the research paper and their faculty mentor(s). The research paper may be a review paper, an internship-based paper, a research paper based on primary or secondary data, or a sustainability-focused model. The research paper demonstrates scholarly and professional competence, an understanding of the literature in the research area, and relevant current practices in the topic area of the research paper.</p>

Academic Rationale

<p>The Master of Science in Sustainability Management (MScSM) program is a course-based professional program, and offers two concentrations – science and management. Students will select their electives as per their concentrations, and the choice of electives offers an opportunity to develop specialized skills in an area of their interest. The Research Paper course provides an opportunity to develop and strengthen their research skills and an additional opportunity to have specialized knowledge in the area of their research paper.</p>

Currently MScSM offers one Research Paper course, SSM1100Y, for all students in the program but this setup has faced difficulties in course delivery as basic concepts, research methods (i.e. data collection, data analysis, etc.), and writing and presentation skills differ slightly between the research papers focused on applications of science and application of social science and management to sustainability. Separate courses are needed to address the unique techniques and considerations of research in these two fields. This proposal to create a new research paper course, SSM1101Y, focuses specifically on the applications of social science and management to sustainability to hone their skills and expertise even further. MScSM students will be required to take one of two research paper courses depending on their research interests - SSM1100Y Research Paper I or SSM1101Y Research Paper II.

Learning Outcomes

By the end of this course, students will be able to:

1. Critically assess a problem set through the application of advanced research and evaluation skills acquired in the Program;
2. Demonstrate skill acquisition in the areas of data collection and analysis appropriate for graduate-level academic research and beyond;
3. Demonstrate a mastery of critical and analytical skills and research habits appropriate for graduate-level academic research and beyond; and
4. Produce a graduate-level research paper that demonstrates advanced-level written and oral communication skills appropriate for academic research and beyond.

Similarity/Overlap With Other Courses & Consultation

SSM1100Y – Research Paper I (This is the complementary research paper course in the program, for students in the Science concentration. Students can take only one of the two Research Paper courses.)

Resource Requirements

The course will be taught by existing faculty members either on load or overload. In the case of overload teaching, the stipend will be paid at the MScSM overload rate.

Other course requirements include the standard requests for classroom space, a/v equipment and support, etc., that is part of normal course offerings.

Governance Approval

Unit Sign-Off	IMI Graduate Curriculum Committee January 10, 2020
Dean's Office Sign-Off	Heather Miller, Vice-Dean Teaching & Learning

	January 20, 2020
Faculty/Division Council	UTM Academic Affairs Committee



University of Toronto Minor Modification Proposal: New Graduate Courses or Changes to Existing Graduate Courses

This template should be used to: create a new graduate course; reactivate a closed/deactivated course; rename an existing course; renumber an existing course; etc.

If you have questions while you are filling out this document, please contact your Dean’s Office.

Graduate Department/Unit/Centre/Institute For courses offered by collaborative specializations, list supporting unit.	Institute for Management & Innovation (IMI)
Faculty/academic division	University of Toronto Mississauga (UTM)
Dean’s Office contact	Yen Du Program & Curriculum Officer yen.du@utoronto.ca Lori Innes Program & Curriculum Assistant lori.innes@utoronto.ca

Part 1: ROSI

Please complete this section. The data will be used to complete the ROSI record.

New Course—fill out all fields	
Course designator and number (e.g., HIS 5XXXH)	SSM2050H
FCE weight (e.g., 0.5, 1.0)	0.5
Full course title for transcript (max 60 characters)	Special Topics in Sustainability
Abbreviated title (max 30 characters)	Sp Topics in Sustainability
Available via Student Web Services (yes or no)	Yes
Course type (regular, modular, continuous or extended)	Regular
Evaluate* function in ROSI used by unit (yes or no) *university’s online course evaluation system	Yes
Online course (yes or no)	No
Required course (yes or no)	No
Grading scale (letter grades or CR/NCR)	Letter
Course prerequisites; if yes, please list (e.g., HIS 5XXXH)	No
Course credit exclusions; if yes, please list	No

(e.g., HIS 5XXXH)	
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Effective Date

Required Field—Effective date must be September 1, January 1 or May 1 and not retroactive.

September 1, 2020

Part 2: Other Changes to Existing Courses

Optional Field—This section may be used to describe other types of changes to existing courses your Faculty/Division tracks. These changes are not posted to the GCT.

N/A

Part 3: New Course Documentation

For Faculty/Divisional approval of new courses, please append the approved course documentation, or complete the template below.

Course Description

As a Special Topics course, this course’s theme and content will vary with every offering and will be decided by the instructor. The course topics will be open to both concentrations of the program. Some examples of course topics include Climate Change, Biodiversity, Gender Equity, Poverty Alleviation, Greenhouse Gases Emissions, and Corporate Social Responsibility. This course will explore the diversity of approaches, ideas, and concepts related to the theme chosen for the course. Students will be exposed to both social and natural science perspectives through in-class lectures and discussions as well as regular guest lecturers. A major end-of-term project requiring the application of theories and methodologies from their chosen area of focus (science or management/ social science) is required.

Academic Rationale

The field of sustainability is evolving quickly and becoming increasingly relevant as society pays more attention to issues around climate change, biodiversity, greenhouse gas emissions, etc. As a result, it is necessary to keep updating the programming accordingly to ensure our graduates continue to have the timely, and leading-edge, knowledge and skills so they are ready for employment and will make a lasting impact on society. In July 2019, the MScSM Program conducted an informal curriculum review. All stakeholders – alumni, employers, experts, faculty members, and students – participated in the review.

While the review confirmed that the MScSM program is doing an excellent job of preparing students and graduates for diverse roles in the workforce; it also recommended the addition of a Social Sustainability Course for relevancy as well as Special Topics course for flexibility and

student autonomy. This proposed new Special Topics course, which will be offered as an elective course, addresses the latter recommendation.

Learning Outcomes

By the end of this course, students should be able to:

- a) Demonstrate a comprehensive knowledge and understanding of the special topic(s) and its (their) importance to sustainability;
- b) Identify and critically evaluate causes and consequences associated with the special topic(s);
- c) Demonstrate critical analysis skills to integrate perspectives from science as well as social science and management on the special topic(s); and
- d) Develop a deeper and critical understanding of the appropriate solution(s) that can be applied in various settings to address the relevant causes and consequences.

Scenario analysis, synthesis paper, and debates will be used in addition to regular tests/examinations and the major end-of-term project to assess learning outcomes.

Similarity/Overlap With Other Courses & Consultation

No overlap with any existing graduate courses.

Consultation occurred with students, faculty, alumni, employers, and industry experts at a recent curriculum review in July 2019. All proponents were in favour of the proposed new course.

Resource Requirements

The course will be taught by existing faculty members either on load or overload. In the case of overload teaching, the stipend will be paid at the MScSM overload rate.

Other course requirements include the standard requests for classroom space, a/v equipment and support, etc., that is part of normal course offerings.

Governance Approval

Unit Sign-Off	IMI Graduate Curriculum Committee January 10, 2020
Dean's Office Sign-Off	Heather Miller, Vice-Dean Teaching & Learning January 20, 2020

Faculty/Division Council	UTM Academic Affairs Committee
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University of Toronto

Minor Modification Proposal:

Change to an Existing Graduate Program or Collaborative Specialization

This template should be used to bring forward all proposals for minor modifications to program or admissions requirements for existing graduate programs or collaborative specializations under the University of Toronto’s Quality Assurance Process.

Program/Collaborative Specialization being modified:	Master of Science in Sustainability Management (MScSM)
Graduate unit:	Institute for Management & Innovation (IMI)
Faculty/academic division:	University of Toronto Mississauga (UTM)
Dean’s office contact:	Yen Du Program & Curriculum Officer Yen.du@utoronto.ca
Version date: (Please change as you edit this proposal.)	January 20, 2020

1 Summary

Check box for type(s) of change.

Summarize what the change is, including details about any changes to FCEs.

<input type="checkbox"/>	Changing admission requirements	<input type="checkbox"/>	Renaming field, concentration or emphasis*
<input checked="" type="checkbox"/>	Changing program requirements	<input type="checkbox"/>	Renaming of program or collaborative specialization (please notify VPAP before governance)
<input type="checkbox"/>	Changing timing of program requirements	<input type="checkbox"/>	Creating a new emphasis
<input type="checkbox"/>		<input type="checkbox"/>	Changes to programs affecting an MOA
<p>Summary: The following program requirement changes are proposed:</p> <ol style="list-style-type: none"> 1. Addition of SSM1120H: Social Dimensions of Sustainability (SSM1120H5) will become a required course in the Master of Science in Sustainability Management (MScSM) Program. All students in the program will be required to complete this course. 2. Reduction of Elective Credit Requirement: Requirements of elective courses will decrease from the existing 6 half courses to 5 half courses in total. MScSM students will still be required to complete 4 half courses from their chosen concentration (Science or Management) but will now be required to complete only one additional elective from the complementary concentration. 			

3. Addition of a new Research Paper Course: With the introduction of SSM1101Y Research Paper II, students will complete one of two research paper courses in the program. Depending on their research interest, students will complete either SSM1100Y Research Paper I (science focused) or SSM1101Y Research Paper II (social science and management focused). Completion of one of these two research paper courses is required for program completion.

* Anything with a changed/new name requires consultation with VPAP Office prior to governance; if name change implies significant change to what is being offered or how it is being offered, this may be a major modification or new program.

2 Effective Date of Change

September 1, 2020

3 Academic Rationale

What are the academic reasons for the change?

The field of sustainability is evolving quickly due to increased attention by everyone. As a result, it is necessary that we keep updating our programming accordingly to ensure our graduates continue to have the timely, and leading-edge, knowledge and skills that ensure they are ready for employment and will make a lasting impact on society. In July 2019, the MScSM Program conducted an informal curriculum review. All stakeholders – alumni, employers, experts, faculty members, and students – participated in the review. The review was done in two stages – collection of review data through survey followed by a full-day stakeholder consultation meeting. That day-long meeting covered the contents of the survey, but more importantly, was a highly productive round-table day of brainstorming and planning.

The review confirmed that the MScSM program is currently doing an excellent job of preparing our students and graduates for diverse roles in the workforce. The review suggested the inclusion of a Social Sustainability Course to the curriculum, as well as an alternative in the Research Paper course. Additional suggestions included the development of a special topics course as an elective, and enhancing Excel and business communication skills across the program.

In this proposal, we are addressing the first two suggestions by adding a new Social Sustainability course as a program requirement and a second Research Paper course as an alternative.

4 Impact on Students

Outline the expected impact on continuing and incoming students, if any, and how they will be accommodated.

As the total number of courses required for program completion remains unchanged (9.0 FCEs in total), impact to continuing students will be minimal. Continuing students will be given the option to either complete their program requirements as outlined when they first entered or to complete SSM1120H as part of their elective courses (in either concentration). As of September 1, 2020, all incoming students will complete the revised program requirements.

5 Consultation

Describe any consultation undertaken with the students, faculty, Dean and chair/director. Address any major issues discussed.

Consultation around these program requirement changes occurred with students, faculty, alumni, employers, and industry experts at a recent curriculum review in July 2019 attended by the MScSM Director. All proponents were in favour of the proposed changes.

6 Resources

Describe any resource implications of the change(s) including, but not limited to, faculty complement, space, libraries and enrolment/admissions).

There are no resource implications for these changes to program requirements, beyond the establishment of new courses. Resource implications related to new courses have been identified in the separate new course proposals.

7 Governance Approval

Unit sign-off	IMI Graduate Curriculum Committee January 10, 2020
Dean's office sign-off	Heather Miller, Vice-Dean Teaching & Learning

Minor Modification Proposal: Change to an Existing Graduate Program

	January 20, 2020
Faculty/division council approval (or delegated body) if applicable	UTM Academic Affairs Committee (AAC)

Appendix A: Calendar Entry

Master of Science in Sustainability Management

Program Description

The Master of Science in Sustainability Management (MScSM) is an interdisciplinary, course-based professional program. The program provides education that integrates knowledge from management, social, and natural sciences to address sustainability issues. The MScSM provides a strong foundation in sustainability management while offering an opportunity to specialize in a management or science concentration. The program is designed for students from diverse educational backgrounds such as management, social science, natural science, and engineering. The program was developed in consultation with leaders and prospective employers in business, non-profit, research, and government organizations.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Institute for Management and Innovation's additional admission requirements stated below.
- An appropriate undergraduate degree from a recognized university in any area of natural science, social science, management, and engineering or any management, environment, or natural resource-driven background with a standing equivalent to at least a mid-B in the final year of the program.
- Successful completion of an undergraduate statistics or mathematics course (0.5 full-course equivalent [FCE] or equivalent).
- Résumé/curriculum vitae (CV).
- Letter of intent outlining the applicant's interest in sustainability issues (750 words).

Program Requirements

Management Concentration

- **Coursework.** A total of **9.0 FCEs** as follows:
 - **6.05 FCEs** (**101** required courses) including SSM 1090H *Capstone Course* and SSM 1100Y *Research Paper I/SSM1101 Research Paper II*
 - **32.05 FCEs** (**65** elective courses) selected by chosen concentration as follows:

- 2.0 FCEs from the Management elective courses
 - ~~10.05~~ FCE from the Science elective courses.
- **Internship.** A summer internship placement (two to four months).

Science Concentration

- **Coursework.** A total of **9.0 FCEs** as follows:
 - ~~6.05~~ FCEs (~~10~~1 required courses) including SSM 1090H *Capstone Course* and SSM 1100Y *Research Paper I/SSM1101 Research Paper II*
 - ~~32.05~~ FCEs (~~65~~ elective courses) selected by chosen concentration as follows:
 - 2.0 FCEs from the Science elective courses
 - ~~10.05~~ FCE from the Management elective courses.
- **Internship.** A summer internship placement (two to four months).

Program Path

Year 1: Fall

SSM 1010Y	Principles of Sustainability Management
SSM 1020H	Decision Making for Sustainability Management
SSM 1040H	Managerial Economics for Sustainability Management
SSM 1050H	Ecosystem Science

Year 1: Winter

SSM 1030H	Environmental Science
SSM 1060H	Managing Sustainable Organizations
SSM 1070H	Sustainability Law and Policy
SSM 1080H	Strategies for Sustainability Management

SSM 1120H Social Dimensions of Sustainability

Plus 0.5 FCE elective

Year 1: Summer

SSM 1110H Sustainability Management Internship

Year 2: Fall

SSM 1100Y/
SSM1101Y Research Paper I/Research Paper II

Plus 1.5 FCE elective

Year 2: Winter

SSM 1090H Capstone Course—Sustainable Enterprise

SSM 1100Y/
SSM1101Y Research Paper I/Research Paper II

Plus 1.0 FCE elective

Program Length

5 sessions full-time (typical registration sequence: F/W/S/F/W)

Time Limit

3 years full-time

Required Courses

SSM 1010Y Principles of Sustainability Management

SSM 1020H Decision Making for Sustainability Management

SSM 1030H Environmental Science

SSM 1040H Managerial Economics for Sustainability Management

SSM 1050H Ecosystem Science

SSM 1060H Managing Sustainable Organizations

SSM 1070H Sustainability Law and Policy

SSM 1080H Strategies for Sustainability Management

SSM 1120H Social Dimensions of Sustainability

SSM 1090H Capstone Course—Sustainable Enterprise

SSM 1100Y/
SSM1101Y Research Paper [I/Research Paper II](#)

Elective Courses

Course selections need to be approved in advance by the Program Director.

Science Electives

EES 1107H Remediation Methods

EES 1117H Climate Change and Impact Assessment

EES 1125H Contaminated Site Remediation

ENV 1002H Environmental Policy

ENV 1704H Environmental Risk Analysis and Management

JPG 1407H Efficient Use of Energy

JPG 1408H Carbon Free Energy

SSM2030H [Advanced Sustainability Management](#)

SSM2050H [Special Topics in Sustainability](#)

Management Electives

ECO 2908H Environmental and Resource Economics

EES 1124H Environmental Project Management

ENV 1707H Environmental Finance and Sustainable Investing

MGT 2918H Multidisciplinary Special Topics

RSM 2216H Special Topics in Accounting

SSM 2010H Marketing in Sustainability Management

SSM 2020H Sustainability Ethics

~~SSM 2030H~~ ~~[Advanced Sustainability Management](#)~~

SSM 2040H

Applied Sustainability Management

SSM2050H

Special Topics in Sustainability