



FOR RECOMMENDATION

PUBLIC

OPEN SESSION

TO: UTM Academic Affairs Committee

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

PRESENTER: Professor Heather Miller, Vice-Dean, Teaching & Learning
CONTACT INFO: 905-569-4768, vdteachlearn.utm@utoronto.ca

DATE: January 4, 2021 for January 11, 2021

AGENDA ITEM: 5

ITEM IDENTIFICATION:

Minor Modification: Graduate Curriculum Changes, UTM

JURISDICTIONAL INFORMATION:

Under section 5.6 of its *Terms of Reference*, the Academic Affairs Committee is responsible for major and minor modifications to existing degree programs. All major modifications shall be reported annually for information to the appropriate body of Governing Council.

GOVERNANCE PATH:

- 1. UTM Academic Affairs Committee [For Approval] (January 11, 2021)**

PREVIOUS ACTION TAKEN:

No previous action was taken on this proposal.

HIGHLIGHTS:

The Graduate Minor Modification proposals (enclosed) outline Minor Modifications to existing graduate programs and courses. These curricular changes are intended to have significant positive effects on a cumulative basis, but are considered to be minor changes in the context of the UTQAP. Proposals for changes brought forward at this meeting were reviewed by the IMI Graduate Curriculum Committee on November 10, 2020 and will come into effect during the 2021-2022 Academic Year.

Master of Biotechnology (MBiotech) Program

Offered through the University of Toronto Mississauga's (UTM) Institute for Management & Innovation (IMI), the Master of Biotechnology (MBiotech) Program is proposing two changes to

existing courses and one new course offering. The first of these changes is a minor title change to their BTC2100Y course from “Topics in Biotechnology” to “Thesis Project in Biotechnology”. This change emphasizes that this course allows for students to complete a final year thesis project, which no other current BTC course offers. It also signals to students the commitment and effort expected within the course. Student transcripts will subsequently provide potential employers with an accurate understanding of the undertaking that is involved in this course.

The next set of changes involve the existing IMI3001H course (Biocommercialization). Split into two parts, the first half of the course is lecture-based and provides students with the theoretical knowledge to be applied in their experiential learning placement (in the second half of the course). The instructors of this course have found that a half-credit, one-term course is not enough time to run both components. To better serve the students and fully realize the course goals, MBIotech is proposing that this course be expanded and split into two half-credit courses – IMI3001H – Biocommercialization I and IMI3003H – Biocommercialization II. The first course (IMI3001H, which is the current/ existing course) will focus on theory and, through additional lectures and instructor contact time, will expose students to more aspects of the subject area and provide additional depth to each topic. The second course, IMI3003H is a newly proposed course that will be the experiential learning component where students, in teams of 3-5, will be partnered with a local company to tackle a real-world problem/ project. An entire half-credit course devoted to the placement will allow for stronger mentoring and a more challenging project that students can dedicate more time to.

Master of Urban Innovation (MUI) Program

The Master of Urban Innovation (MUI) Program is a professional graduate master’s program offered through the Institute for Management & Innovation (IMI) at the University of Toronto Mississauga (UTM). The MUI Program is currently proposing changes to improve the student experience in the program’s second year. The first change is an increase to the weighting of the Capstone Course (MUI2095) from a half-credit to a full-credit. This re-weighting more accurately signals the importance of the course within the requirements of the Program and will allow for the development of more robust final projects. In conjunction with the Capstone Course re-weighting, the MUI Program is also proposing a reduction in the elective requirements to be completed in second year (from 4.0 full-course equivalents (FCEs) to 3.5 FCE). This will allow for the Capstone Course to become a full credit without requiring students to add an additional half-credit to their program.

The second part of the program requirements proposal collapses the program’s current three lists of acceptable elective courses into one. It further proposes the removal of the recommendation to complete 2.0 FCE from one of the three lists as this would no longer be applicable with only one course listing. This change will help enable students to better select courses that fit with their specific academic and career path while allowing the program to respond to the changing landscape of elective options at the graduate level. As many of the elective courses are not within the MUI program, these courses are not guaranteed to be offered with any regularity and may be retired without notice to the MUI program, making it difficult to ensure students have enough options to complete at least 2.0 FCE in one course grouping. Students will also have the ability

to include courses of their own choosing, with the Program Director's pre-approval, to fulfill this elective requirement.

FINANCIAL IMPLICATIONS:

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

RECOMMENDATION:

Be it Resolved,

THAT the curriculum changes in the Master of Biotechnology (MBiotech) Program and the Master of Urban Innovation Program (MUI), as recommended by the Vice-Principal Academic & Dean, Professor Amrita Daniere, and as described in their respective proposals, be approved, effective on Septemeber 21, 2021.

DOCUMENTATION PROVIDED:

- Minor Modification – Graduate Curriculum, UTM, BTC2100
- Minor Modification – Graduate Curriculum, UTM, IMI3001
- Minor Modification – Graduate Curriculum, UTM, IMI3003
- Minor Modification – Graduate Curriculum, UTM, MUI Program Changes
- Minor Modification – Graduate Curriculum, UTM, MUI 2095



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	Lori Innes Program & Curriculum Assistant Lori.innes@utoronto.ca Yen Du Program & Curriculum Officer Yen.du@utoronto.ca

Part 1: ROSI

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

Changes to an Existing Course (fill out applicable fields)	
Current course designator and number (required) (e.g., HIS 5XXXH)	BTC 2100Y
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)	Thesis Project in Biotechnology
New/renamed abbreviated title (max 30 characters)	Thesis Project in Biotech
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, 2021

Part 2: Other Changes to Existing Courses

Description of Change

A course title change from “Topics in Biotechnology” to “Thesis Project in Biotechnology” for this elective course in the Master of Biotechnology (MBiotech) Program.

Academic Rationale

The MBiotech Program is wishing to offer—and emphasise—the opportunity for a *thesis-based* course to supplement the program’s elective roster. Currently, no courses registered under the MBiotech Program explicitly offer a thesis component. Introducing “Thesis Project” in place of “Topics” in the title of this existing course will signal to students that this offering will require a significant written dissertation for credit that will be evaluated at the conclusion of the year-long course.

Resource Implications

None.

Governance Approval

Unit Sign-Off (Committee name and meeting date)	IMI Graduate Curriculum Committee November 10, 2020
Dean’s Office Sign-Off (Name and date)	Heather Miller, Vice-Dean Teaching & Learning [date]
Faculty/Division Council (name and date)	UTM Academic Affairs Committee (AAC) January 11, 2021



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

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

Part 1: ROSI

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

Changes to an Existing Course fill out applicable fields	
Current course designator and number (required) (e.g., HIS 5XXXH)	IMI 3001H
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)	Biocommercialization I
New/renamed abbreviated title (max 30 characters)	Biocommercialization I
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— September 2021

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.

We propose changing the title of this course from **Biocommercialization** to **Biocommercialization I** to provide internal title consistency between this course and the new course proposal for IMI3003H (submitted concurrently with this course change), **Biocommercialization II**. The two courses will now comprise a tandem pair of half-course offerings that flow one to the other. The content and learning objectives of the two courses will be redistributed and expanded upon such that IMI3001H will encompass the theory components of the subject area, whereas IMI3003H will focus on the practical and experiential learning aspects.

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

N/A

Academic Rationale

N/A

Learning Outcomes

N/A

Similarity/Overlap With Other Courses & Consultation

This would be a distinct course offering.

Resource Requirements

No additional resource requirements.

Governance Approval

Unit Sign-Off

IMI Graduate Curriculum Committee
November 10, 2020

Dean's Office Sign-Off	Heather Miller, Vice-Dean Teaching & Learning
Faculty/Division Council	UTM Academic Affairs Committee (AAC) January 11, 2021



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

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Graduate Department/Unit/Centre/Institute	Institute for Management & Innovation (IMI)
Faculty/academic division	University of Toronto Mississauga (UTM)
Dean’s Office contact	Lori Innes Program & Curriculum Assistant lori.innes@utoronto.ca Yen Du Program & Curriculum Officer yen.du@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)	IMI3003H
FCE weight (e.g., 0.5, 1.0)	0.5
Full course title for transcript (max 60 characters)	Biocommercialization II
Abbreviated title (max 30 characters)	Biocommercialization II
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)	Yes

*university's online course evaluation system	
Online course (yes or no)	No
Required course (yes or no)	No
Grading scale (letter grades or CR/NCR)	Letter grades
Course prerequisites; if yes, please list (e.g., HIS 5XXXH)	IMI3001H (recommended co-requisite)
Course credit exclusions; if yes, please list (e.g., HIS 5XXXH)	IMI 3001H if completed before 2020-21

Effective Date

Required Field— September 2021

September 1, 2021

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.

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

In Biocommercialization II, students will apply their theoretical knowledge from Biocommercialization I (IMI3001H) through an experiential learning opportunity with a early-stage (bio) technology venture. Working in teams of 3-5, students are assigned a real-world problem/ project presented by a company partner that requires them to critically evaluate the situation and synthesize their theoretical learning to develop and implement a strategic solution. Although the focus is on biocommercialization, depending on the complement of students in a particular year, firms focused outside the biotechnology arena may also be included (i.e. medical devices, life science tools, and other science-based ventures). Projects will involve close interactions with early-stage firms and their management, their potential seed investors, and supporting organizations such as ICUBE, CDL, RICs, MaRS, OCE, and IRAP. The course culminates with a final report and an end-of-term group presentation.

Academic Rationale

Currently, Biocommercialization exists as one half-credit course (IMI3001H) that tries to compress both the theory and experiential component into one term. This has resulted in a modular-style course where lectures place emphasis on topics that are relevant to the project/problem students will encounter in their placement with little to no time to cover other topics that may be relevant to biocommercialization, research, and consulting. To better prepare students for their placement, IMI is proposing that the Biocommercialization course become two half-credit courses – the first part will cover the theory through lectures and ‘sandbox’ projects and conclude with a final examination; the second part will be this new course (IMI3003H) which will focus on the placement and application of knowledge. Expanding Biocommercialization into two half-credit offerings will allow additional time to not only provide students with the depth and breadth to fully prepare them for their placement (in IMI3001H) but will also allow more time to complete the placement project (IMI3003H). This also means projects tackled in IMI3003H can become more robust.

Learning Outcomes

Through a project-based placement with a local company partner, students will:

- Be exposed to a wide range of interdisciplinary elements that contribute to the start-up and functioning of a biotech corporation. This includes product conception (proof of concept), as well as the development and commercialization phases which biotech companies need to consider in bringing their product through the regulatory pathway.
- Become familiar with a series of analytical tools and evaluation frameworks that can be employed to analyze the team, market size, industry attractiveness, competitiveness, product distinction, traction, go-to-market and financing strategies of early stage firms.
- Be introduced to individuals currently working in the industry and give them the opportunity to learn lessons based on real-life workplace experiences.

Similarity/Overlap With Other Courses & Consultation

This would be a distinct course offering.

Resource Requirements

IMI3001H is currently jointly taught by two adjunct faculty from IMI and the Department of Chemical & Physical Sciences (CPS). This setup will continue as Biocommercialization expands to two half-credits with both parts continuing to be co-taught by its current instructors. The IMI Director and Chair of CPS have been consulted and both have confirmed this additional half-credit (i.e. a quarter-credit increase per instructor) of teaching is acceptable.

Additional space will not be required for IMI3003H as this is the placement course. Resources used to host the final presentation day will transfer over from IMI3001H.

Governance Approval

Unit Sign-Off	IMI Graduate Curriculum Committee November 10, 2020
Dean's Office Sign-Off	Heather Miller, Vice-Dean Teaching & Learning
Faculty/Division Council	UTM Academic Affairs Committee (AAC) January 11, 2021

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: E.g., MSc in Immunology	Master of Urban Innovation (MUI)
Graduate unit:	Institute for Management & Innovation (IMI)
Faculty/academic division:	University of Toronto Mississauga (UTM)
Faculty/ academic division contact:	Amrita Daniere Vice-Principal Academic & Dean, UTM Vpdean.utm@utoronto.ca
Dean’s office contact:	Lori Innes Program & Curriculum Assistant Lori.innes@utoronto.ca Yen Du Program & Curriculum Officer Yen.du@utoronto.ca
Version date: (Please change as you edit this proposal.)	December 4, 2020

1 Summary

- Check box for type(s) of change.
- Summarize what the change is, including details about any changes to FCEs.

	Changing admission requirements		Renaming field, concentration or emphasis*
X	Changing program requirements		Renaming of program or collaborative specialization (please notify VPAP before governance)
	Changing timing of program requirements		Creating a new emphasis
			Changes to programs affecting an MOA
Summary: The Master of Urban Innovation (MUI) program is proposing the following program changes:			

1. A reduction of the elective requirements from 4.0 FCE to 3.5 FCE to accommodate the increased weight of the required capstone course (from 0.5 FCE to 1.0 FCE). This will ensure no net change in the total number of credits required in the Program.
2. The collapse of the three existing elective course groupings into one elective course list from which students can choose. In doing so, the recommendation to complete 2.0 FCE from one of three elective course groupings will be removed.

* 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, 2021

3 Academic Rationale

- What are the academic reasons for the change?

The Master of Urban Innovation (MUI) Program is a new graduate professional program that welcomed its first cohort of students in September 2020. At the time of program development and proposal, the capstone course was weighted at 0.5 FCE and students were required to take 4.0 FCE of elective courses from a prescribed list of electives.

The MUI program is proposing a decrease in the number of required elective courses from 4.0 FCE to 3.5 FCE. This reduction is being proposed concurrently with an increase in weight of the capstone project course from 0.5 FCE to 1.0 FCE (see separate proposal to change an existing graduate course).

The increase in the weight of the capstone project reflects the pedagogical value of engaging students in a sustained urban innovation challenge to their education and training. Such a weighting signals to students and employers the relative importance of the capstone project as a defining feature of the MUI program. The corresponding decrease in required elective courses will accommodate the full-credit capstone project without increasing the total number of credits required in the MUI Program.

Additionally, the MUI program proposes to provide more flexibility and choice in elective options by collapsing the current three course groupings into one large elective course list. In doing so, the recommendation for students to complete at least 2.0 FCE from one of the three groupings is no longer relevant or applicable and will be removed. Students will also have the ability to identify additional courses relevant to

their academic and career goals, related to urban innovation and economic development, under the guidance of the MUI program director and staff. Thus, these proposed changes allow students' the ability to carve their own academic pathway and experience in their second year. It also responds to the changing landscape of elective course offerings. Due to the time lapse between program development and program launch, many of the courses listed as potential electives outside of the MUI program are no longer offered or are offered on an infrequent basis. This change provides flexibility for both students and the program.

4 Impact on Students

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

Student impact from these program changes is expected to be positive for incoming students. It will signal to students the relative weight and importance of the capstone project, while also indicating that students will have the ability to carve their own academic pathway and experience in their second year.

Student impact from these program changes is also expected to be positive for current students. Incoming students have previously indicated concern that the workload normally associated with a master's level capstone course would be greater than a half-credit. Students are also aware of issues related to electives and we are making these changes to mitigate those challenges while enhancing the program. Program changes will be communicated to students upon approval to encourage advanced course planning and consultation.

5 Consultation

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

Current MUI faculty, administrative staff and students were consulted during the development of this proposal.

6 Resources

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

No resource implications at the program level.

7 Governance Approval

Unit sign-off (Committee name and meeting date)	IMI Graduate Curriculum Committee November 10, 2020
Dean's office sign-off (Name and date)	Heather Miller, Vice-Dean Teaching & Learning
Faculty/division council approval	UTM Academic Affairs Committee (AAC) January 11, 2021

Appendix A: Calendar Entry

Please use track changes to indicate where changes have been made.

Program Description

The Master of Urban Innovation (MUI) is a full-time, professional program that will encompass studies in urban economic development, community capacity building, innovation management, local and regional governance, urban sustainability, and real estate development for innovation. The MUI will complement the suite of programs in management, innovation, and sustainability currently offered in the Institute for Management & Innovation and will build on the strengths of other key academic units at UTM, including the Departments of Geography, Economics, and Political Science, and the Institute of Communication, Culture, Information and Technology.

The objective of the MUI program is to respond to the growing job opportunities that exist for professionals trained in the fields of urban economic development and innovation through a cross-disciplinary approach. Upon graduation, MUI students will have acquired the analytical tools to enable them to produce effective economic development policies and plans, including a detailed knowledge of strategic management techniques, the role of real estate markets in local economic development, and critical tools for financial analysis.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Institute for Management & Innovation's additional admission requirements stated below.
- An appropriate bachelor's degree from a recognized university in social sciences, management/commerce, or a related field such as architecture or civil engineering, with a standing equivalent to a mid B in the final year of the program.
- Successful completion of 0.5 full-course equivalent (FCE) in an undergraduate statistics course.
- Letter of intent.
- Three letters of reference.
- A writing sample.

Program Requirements

- Students must complete a total of **9.5 FCEs** as follows:
 - 4.5 FCEs from ~~other~~ core courses (MUI 1010H, MUI 1020H, MUI 1030H, MUI 1040H, MUI 1050H, MUI 1060H, MUI 1075H, MUI 1080H, MUI 1090H)
 - 0.5 FCE summer internship (MUI 1100H)
 - ~~0.5~~ **1.0** FCE capstone group project (MUI 2095H)

- 4.03.5 FCEs chosen from the preapproved elective listing. It is recommended that a minimum of 2.0 FCEs be completed from one of the three groupings. The remaining 2.0 FCEs can come from any of the course groupings. Course selections need to be approved in advance by the Program.



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

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Dean's Office contact	Lori Innes Program & Curriculum Assistant Lori.innes@utoronto.ca Yen Du Program & Curriculum Officer Yen.du@utoronto.ca

Part 1: ROSI

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

Changes to an Existing Course fill out applicable fields	
Current course designator and number (required) (e.g., HIS 5XXXH)	MUI 2095H
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)	MUI 2095Y
New/renamed full course title for transcript (max 60 characters)	
New/renamed abbreviated title (max 30 characters)	
New FCE weight of an elective course (e.g., 0.5, 1.0)	1.0 FCE
Change to grading scale (from letter grades to CR/NCR or vice versa)	

Change to course type (from regular to continuous, modular, extended, etc.)	
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Effective Date

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

September 1, 2021

Part 2:

Academic Rationale

<p>The Master of Urban Innovation (MUI) program is designed with a strong, applied and experiential learning based curriculum, culminating in one major capstone project. The increased weight of the capstone signals the importance of this activity to a student's academic program. It also acknowledges the actual amount of time and effort it will take for students to work on a dedicated problem and produce a meaningful final project. The project is a critical piece of the student's overall portfolio that will draw upon the cumulative base of knowledge and skills they have acquired over the duration of the program. A full credit course will provide students with the time and space in their program to fully explore a major issue, leading to stronger pedagogical outcomes and improved long-term career success, post-graduation.</p>

Resource Requirements

<p>There are no resource changes in aggregate, as the number of elective courses offered by the MUI program will be reduced to offset the increased weight of the capstone project.</p>

Governance Approval

Unit sign-off (Committee name and meeting date)	IMI Graduate Curriculum Committee November 10, 2020
Dean's office sign-off (Name and date)	Heather Miller, Vice-Dean Teaching & Learning
Faculty/division council approval	UTM Academic Affairs Committee (AAC) January 11, 2021