

UTQAP Cyclical Review: Final Assessment Report and Implementation Plan

1 Review Summary

Program(s) Reviewed:	Master of Management of Innovation (MMI)
Division/Unit Offering Program(s):	Institute for Management & Innovation (program only review)
Commissioning Officer:	Vice-Principal, Academic & Dean, University of Toronto Mississauga
Reviewers (Name, Affiliation):	<ul style="list-style-type: none">• Professor Joanne Roberts, Yale-NUS College, Singapore• Professor Brian Wright, University of California, Berkeley
Date of Review Visit:	July 4-5, 2022
Review Report Received by VPAP:	November 10, 2022
Administrative Response(s) Received by VPAP:	March 11, 2024
Date Reported to AP&P:	April 10, 2024

Previous UTQAP Review

Date: December 8-9, 2014

Summary of Findings and Recommendations

Significant Program Strengths

- Original and creative program fills important educational need
- High-quality, motivated students
- Strong program completion rates and appropriate employment of graduates
- High quality research from committed and dedicated faculty
- Very high morale of faculty, staff and students

Opportunities for Program Enhancement

- Strengthening the capstone experience for students and facilitating student preparation prior to the program
- Further developing the provision of student services
- Strengthening external relationships, building greater ties with employers and industry

Current Review: Documentation and Consultation

Documentation Provided to Reviewers

Terms of reference; Self Study and Appendices; Previous Review Report and Administrative Responses; University of Toronto Graduate Degree Level Expectations; UofT Facts & Figures, 2021; UTM Divisional Academic Plan, 2017; UTM Vision Statement, 2017; School of Graduate Studies Academic Calendar 2021-22 (Institute for Management and Innovation excerpt); School of Graduate Studies Admissions Guide, 2021-22; Tri-Campus Framework (Framework for a New Structure of Academic Administration for the Three Campuses); Access to all course descriptions; Access to the curricula vitae of faculty.

Consultation Process

As determined by the Commissioning Officer, the reviewers met with:

- Vice-Principal, Academic and Dean, Vice-Dean Teaching & Learning, and the Vice-Dean Graduate & Postdoctoral Affairs
- IMI Director
- MMI Program Director
- Core IMI faculty and faculty from IMI/Department of Management
- Program alumni and professional representatives
- Program Staff
- Current students

Current Review: Findings and Recommendations

1. Undergraduate Program(s): n/a

2. Graduate Program(s)

Unless otherwise noted, all bulleted comments apply to all programs reviewed.

The reviewers observed the following **strengths**:

- Overall quality
 - ▶ The “exceptional group of students forms the foundation of a remarkable body of alumni within the local community, interested in and increasingly capable of supporting the mission of their program and the University”
- Admissions requirements
 - ▶ Administration of admissions is thoughtful, careful and holistic, using interviews to construct a class with a collaborative culture, “an estimable achievement for a program of this type”
 - ▶ Current admissions focus on students with strong undergraduate academic records in science and engineering
- Curriculum and program delivery
 - ▶ Class sizes are small, which is key to student development of excellent ‘soft skills’
 - ▶ MMI program much improved with the integration of the internship following the last review
 - ▶ “Experiential learning is embedded in a number of courses, electives are varied, assessment methods vary, and in general, curricular offerings are excellent.”
 - ▶ Poster session at the end of the year is excellent and serves to celebrate student achievements, engage the community of partners, orient incoming students to the program and introduce them to recent alumni
- Accessibility and diversity
 - ▶ “We note that the sample of students and alumni we met appeared to be quite diverse, across national and gender lines”
- Student engagement, experience and program support services
 - ▶ The MMI does a “remarkable” job in meeting the needs of its students; students are uniformly happy with the program, satisfied with its quality
 - ▶ Students and graduates are very impressive, and “were able to articulate the vision and value of the program more clearly than anyone else [the reviewers] spoke to”.
 - ▶ Students see value in the program’s targeting of individuals with more technical backgrounds, who wish to pivot out of research work
 - ▶ Students note no substantive issues with instruction, coordination between instructors and staff is good, and changes to internship model suggested at the last review has made the program particularly effective in placement
 - ▶ Professional development programming is thoughtful and well designed; internship matching is done with care

- ▶ Students observe that changes to the internship model since the last review have made the program particularly effective in placement
- ▶ Alumni report that the program has enabled them to meet their professional goals
- Quality indicators – graduate students
 - ▶ Students interviewed during site visit were impressive
 - ▶ Students appear to have no problem completing the program on time; accelerated structure of a one-year program seems well suited to their needs
- Quality indicators – alumni
 - ▶ Graduates interviewed during site visit were impressive
 - ▶ Alumni report that they are happy in their current positions, and that they all have recommended the program to others; “[we] take this as extremely positive evidence of a successful program, of which the University and Campus should be proud”
 - ▶ “Several alumni affirmed that their managers have decided, based on recent experience, to fill related positions exclusively from the [MMI] program”
- Student funding
 - ▶ Students report that program fees are not inappropriate (although sometimes difficult to manage)

The reviewers identified the following **areas of concern**:

- Objectives
 - ▶ If the MMI moves towards becoming a general management program, “it will face intensive competition from many corners”
- Curriculum and program delivery
 - ▶ First semester noted as particularly demanding, especially for students with less mathematics experience

The reviewers made the following **recommendations**:

- Objectives
 - ▶ Focusing recruitment on students in STEM who are pivoting to management is a “nice niche” for them MMI, and seems geographically appropriate given the program’s Mississauga location
- Admissions requirements
 - ▶ Maintain current admissions focus on students with strong undergraduate academic records in science and engineering, and consider expanding to all STEM fields, to allow for some program growth, and provide more enrolment stability
- Curriculum and program delivery
 - ▶ Maintain current small class size for the time being, which is key to student acquisition of soft skills
 - ▶ “If there is sufficient growth of the pool of applicants, perhaps in the future, a second section could be added and the program could have two classes of 30-40 each, but this might require additional staff.”
 - ▶ Review the sequencing of courses and make updates if needed, given issues with the heaviness of the first semester

- ▶ Consider ways to embrace more entrepreneurship in the program
- ▶ Refrain from reducing program’s experiential learning components in any way
- ▶ “The MMI program was much improved with the integration of the internship after the last review; this outcome is a credit to the initiatives taken by the staff. We recommend it stay with this structure”
- ▶ Students note desire for professional development workshops to be more spread over the year, instead of crowded in the first semester when coursework is most demanding
- Accessibility and diversity
 - ▶ Reviewers note importance of documenting progress on diversity and equity in future review processes
- Student engagement, experience and program support services
 - ▶ Reviewers recommend exploring opportunities to increase student exposure to entrepreneurship in the program, and exploring the possibility of leveraging ICUBE as an available resource

3. Faculty/Research

The reviewers observed the following **strengths**:

- Research
 - ▶ “the world-class quality of the research related to innovation produced and published by past Directors appears to have been complementary to their excellent managerial and educational contributions to the program”
- Faculty
 - ▶ Faculty are drawn mainly from UTM’s Department of Management, and are clearly very strong instructors who enjoy teaching MMI students

The reviewers identified the following **areas of concern**:

- Research
 - ▶ Reviewers note lack of clarity regarding the importance of research to the MMI (and to IMI in general)
 - ▶ “It is interesting to note that the faculty, although they are very happy to teach in MMI and value their contacts with its students, do not think of MMI (or IMI) as their scholarly or intellectual home; it is not an organizing frame for research within UTM”

The reviewers made the following **recommendations**:

- Faculty
 - ▶ “We urge that IMI not hire its own management research faculty to support MMI, but instead continue to bring over Management faculty as done at present”
 - ▶ Explore the possibility of joint appointments, ensuring that these faculty would have full access to mentoring and professional development within IMI and within their disciplines

- ▶ In the event that IMI were to begin hiring tenure track staff, these should be aligned with disciplinary priorities; reviewers also highlight the critical importance of ensuring that they would have access to the same resources and supports as faculty in academic departments

4. Administration

Note: Issues that are addressed through specific University processes and therefore considered out of scope for UTQAP reviews (e.g., individual Human Resources issues, specific health and safety concerns) are routed to proper University offices to be addressed, and are therefore not included in the Review Summary component of the Final Assessment Report and Implementation Plan.

The reviewers observed the following **strengths**:

- Relationships
 - ▶ Morale of faculty, students and staff is uniformly high; overall relationships are very positive
 - ▶ Students have a fantastic culture, and are connected to alumni and current staff
 - ▶ Faculty are sensitive, respectful, and responsive
 - ▶ Much of MMI's success is due to the strong cooperation among faculty, and close personal relations between successive directors
 - ▶ Staff "have become the heart and soul of the program, not only devoted to their duties but representing the true embodiment of its innovative mission"
 - ▶ Staff supporting the program are particularly strong and committed, and deliver "holistic and wrap-around support" to students; were very committed to student wellbeing during COVID-19
 - ▶ Staff do a very thorough job of recruiting and screening students, to construct a class that is extremely well-oriented to collaboration and growth
 - ▶ Staff maintain the alumni network, as well as close relations with many employers and industry partners
 - ▶ MMI alumni "strikingly articulate, flexible, confident, and resourceful"; and share a common positive and mutually supportive culture
 - ▶ MMI has enhanced relations between local innovative firms and UTM, with potential for even more valuable connections as alumni cohorts advance in their careers
- Organizational and financial structure
 - ▶ Program benefits greatly from having a dedicated classroom, where students attend classes and do group work
- Long-range planning and overall assessment
 - ▶ Program is overall very successful and healthy, meeting its goals, and financially stable
 - ▶ Program is well aligned with the University's objectives, given its potential reach and local impact
 - ▶ MMI "well positioned in its current geography and is at an appropriate price point"
 - ▶ Key recommendations of the last review have been implemented very effectively

The reviewers identified the following **areas of concern**:

- Relationships
 - ▶ Reviewers note concerns that the success of the MMI relies very heavily on “partly serendipitous personal links”, primarily with UTM Management
 - ▶ Outside of the classroom, faculty appear less connected to students than staff do (though students do not seem to view this as a significant issue)
 - ▶ Reviewers note lack of obvious connection between the MMI and ICUBE initiative; and opine that ICUBE is overdue for critical attention to assess opportunities to leverage its resources and initiatives for other UTM programs
- Organizational and financial structure
 - ▶ Reviewers observe some duplication of roles and services across various programs in IMI; and note related limitations on opportunities for staff professional development within the current structure
 - ▶ Reviewers were struck by the lack of windows and outdated technology in the MMI’s dedicated classroom, and its “dull atmosphere” relative to other spaces
 - ▶ Concerns noted about the lack of individual offices for staff, particularly those who might need to meet privately with students on a regular basis
- Long-range planning and overall assessment
 - ▶ Significant concerns noted regarding the MMI’s dependence on UTM Management; “this institutional structure introduces a significant structural vulnerability since the Chair of Management is not officially accountable or incentivized to ensure the staffing and success of the program”
 - ▶ While acknowledging that this may be beyond the scope of the review, reviewers highlight a concerning lack of clarity regarding IMI’s overall mission and vision; they also note a related lack of clarity around how IMI contributes to the success of the MMI, and how the MMI advances the mission of IMI
 - ▶ “[W]e do not see this program as a potential generator of a large financial surplus for the Campus.”
 - ▶ Significant overlap observed between the MMI and the MBiotech program

The reviewers made the following **recommendations**:

- Relationships
 - ▶ Devote care and attention to maintaining the relationship between IMI and the UTM Department of Management; IMI encouraged to clearly articulate how the relationship between these units can be mutually beneficial and non-competitive
 - ▶ “Retaining and continuing to develop [current] staff will be crucially important for the success of the program”
 - ▶ MMI could enhance efforts to leverage the strengths of other faculty in the U of T ecosystem (such as those at Rotman), and their interests in academic-industry links, to bring even more value to the program

- ▶ The MMI could increase efforts “to be a convening force bringing together faculty, students, alumni, and industry partners”; explore opportunities to increase faculty involvement in industry relations
- ▶ Explore opportunities to position UTM as “an intellectual hub of the management of innovation” to benefit the program, and increase collaborative opportunities for faculty
- ▶ Some students note that the MMI could be marketed more widely on the St. George campus
- ▶ Highlight alumni’s excellent experiences in the MMI in communications across the University and beyond, to aid in recruitment and further enhance the impact and visibility of the program
- ▶ Evaluate the role of ICUBE within IMI, and explore the possibility of enhanced engagement between the MMI and ICUBE, to potentially generate complementarities for students, staff, faculty and local firms
- Organizational and financial structure
 - ▶ Prioritize updates to the dedicated MMI classroom, if a more appropriate space can’t be identified
 - ▶ Prioritize securing private and accessible office space for staff who require it to perform their work effectively
 - ▶ Consider structural approaches to minimizing duplication of staff roles and services across IMI programs
 - ▶ Explore approaches to providing staff with opportunities to expand their scope and engage in professional development; for example by leveraging MMI strengths in student supports, and alumni and industry relations more broadly across UTM
- Long-range planning and overall assessment
 - ▶ Reviewers recommend continuing to draw the MMI director from UTM Management, and exploring the possibility of making the MMI a joint program of UTM Management and IMI; “A formal relationship with Management will ensure that the program and its staffing are more stable and more secure going forward”
 - ▶ Reviewers caution that any attempts to scale the MMI up to generate a financial surplus, while maintaining the high quality of the program, would likely be “misguided and unsuccessful”
 - ▶ Reviewers recommend assessing the structures of both the MMI and MBiotech, and exploring opportunities for greater integration
 - ▶ Reviewers strongly recommend that UTM leadership undertake a strategic review of IMI as a unit to clarify its mission and vision, and to identify potential future directions for the MMI and other offerings
 - ▶ “Although we did not review IMI, we would encourage UTM to consider using this grouping of professional programs to have much more active and vibrant engagement with the local community and the community of alumni”
 - ▶ Reviewers recommend that the MMI continue to research and articulate its identity and value within the market, including tracking alumni trajectories, noting that “as the number of these types of professional master's programs continues to grow and this segment of the educational market continues to become more crowded, it will

be ever more important to clearly articulate and disseminate the vision, value, and impact of the program”



March 7, 2024

Professor Susan McCahan
Vice-Provost, Academic Programs
Office of the Vice-President and Provost
University of Toronto

Re: Request for Administrative Response – External Review of the Master of Management in Innovation (MMI), University of Toronto Mississauga

Dear Susan,

Thank you for your letter of November 14, 2023 to request the decanal administrative response to the review of the Master of Management in Innovation (MMI), which was held on July 4-5, 2022. I thank the review team (Professor Joanne Roberts, Yale-NUS College, Singapore, and Professor Brian Wright, University of California Berkeley) for meeting with faculty, students and staff in the program, and for their thorough report.

Overall, the reviewers found students in the program to be exceptional, and that the program has enabled them to meet their professional goals. They noted the strength of the program staff, who are essential to the outcomes for the program, and the strength and quality of the faculty in the program, who enjoy teaching this group of students. In their recommendations for the program, the reviewers suggest several ways to maintain excellence in the curriculum, such as examining the sequence of courses, enhancing entrepreneurial activity, and maintaining the level of experiential learning components. They suggest a clearer articulation of vision and values for the program, a strategic review of IMI, and expanding admissions to all STEM fields, as well as considering approaches to ensuring the long-term stability of the program while maintaining a small cohort size.

In the enclosed table you will find a summary of responses to specific recommendations of the reviewers, which outlines the program and decanal responses as well as an implementation plan identifying specific actions and timelines. This response was developed in consultation with the Program Director and Director of the Institute for Management and Innovation (IMI), and in consultation with IMI faculty and staff during a Town Hall held on February 14, 2024. Progress checks and monitoring of the implementation plan will occur through the Director's Annual Report to the Dean.

I note that the response to this review was considered alongside the response to the review of the Master of Science in Sustainability Management (MScSC), which was held in 2023. In discussions related to the reviews of both the MScSC and MMI, it became evident that future reviews of programs offered by IMI would benefit from reviewers understanding the context of the unit and all its programs, rather than assessing programs on an individual basis. We will plan to hold a review of IMI and its programs in Summer 2025, rather than review programs individually between 2024-2027 as previously scheduled. This will enable us to receive a fulsome set of recommendations about the direction of the unit and its programs.



The next external review of the MMI will then take place in Summer 2025, alongside a review of the Institute for Management and Innovation and its programs. This review's timing will serve as a progress check on the short-term recommendations stemming from the current review.

Sincerely,

A handwritten signature in black ink, appearing to read 'Nicholas Rule'.

Nicholas Rule
Vice-Principal, Academic & Dean

Encl: 2021-22 UTQAP Review of the UTM Master of Management in Innovation - Review Recommendations (table)

CC: Shauna Brail, Director, Institute for Management and Innovation, University of Toronto Mississauga
Daniella Mallinick, Assistant Dean, University of Toronto Mississauga
Martha Harris, Manager, Academic Programs, Reviews & Quality Assurance, University of Toronto Mississauga

2021-22 UTQAP Review of the UTM Master of Management in Innovation - Review Recommendations

Request Prompt <i>verbatim from the request</i>	Rec. #	Recommendations from Review Report <i>verbatim from the review report</i>	Program Response	Dean's Response	Implementation Plan
<p>The reviewers made a number of recommendations related to maintaining excellence in and/or enhancing the MMI curriculum, including:</p> <ul style="list-style-type: none"> Addressing student workload concerns in the first semester by examining the sequencing of courses and making adjustments where appropriate; Exploring approaches to encouraging/enhancing entrepreneurial activity Avoiding any reduction of the program's experiential learning components 	1	<p>"Our main curricular suggestions are to consider the sequencing of courses given the issues with the heaviness of the first semester, to consider embracing more entrepreneurship, and to not reduce in any way the experiential learning components." (p.7)</p>	<p>Sequencing of courses: Please see point 2 below.</p> <p>More entrepreneurship/experiential learning: In 2023-2024, we have introduced a new MMI elective course, MMI2000H, "Product Management by Design". This course has a strong experiential component where students work directly with a business to solve a design problem. The course content engages with ideation and how to bring an idea to market, a core component of entrepreneurship. We emphasize that most of our students have 0-2 years of work experience and typically place in larger organizations. Bringing in more entrepreneurship (the creation of a new business that is managed by the student) is something we can consider, balancing the needs and placement of our current students. We may consider bringing this up in a faculty/staff retreat (see point 2 and point 3).</p>	<p>The OVPAD supports the unit's curriculum review and development process. Members of the Programs and Curriculum Unit (PCU) in the OVPAD are available to guide the unit through curriculum change submissions should they be needed.</p>	<p>Short-to-Medium Term: To be discussed in a faculty retreat, to determine feasibility of more experiential learning and success of the newly introduced MMI2000H course.</p>
	2	<p>"If workload in the first semester continues to be excessive, the faculty could consider whether it warrants reviewing the sequencing of courses...They did suggest to us that some of the professional development workshops be spread out more over the year instead of crowded in</p>	<p>Demanding coursework: Two years ago, we introduced a math, statistics and coding bootcamp to help put all our incoming students on the same level. We did this because some students indicated they struggled with technical material in the first semester.</p>		<p>Short-to-Medium term: Feasibility of these recommendations will be reviewed in an upcoming faculty retreat, to determine</p>

		semester one when their course work is most demanding.” (p.8)	<p>Sequencing of courses: We will discuss in a faculty and staff retreat. Our incoming students typically have little or no business exposure and so our fall semester courses teach them the basics. The winter courses build on the knowledge gained in fall semester and are geared towards building subject matter knowledge in innovation management that will be useful in the summer internships.</p> <p>Spreading out professional development: We will discuss this in a retreat. A consideration is that many of our professional development events are designed to help students prepare for internship interviews, which happen in early winter. A risk of moving them later is our students may end up being less prepared for their internship interviews.</p>		potential curriculum changes that can be made in the next few years.
	3	“...can exposure to entrepreneurship be increased in the program? Can ICUBE be developed and perhaps re-positioned so as to become a useful resource available to the program?” (p.8)	Since the external review, we have increased engagement with ICUBE in at least two ways. First, ICUBE has introduced new electives on leadership and project management. Our students used to take these courses from the Faculty of Applied Science and Engineering, but are now taking them in ICUBE. Second, in the past two years we have had more students take internships in ICUBE.	The OVPAD supports the unit’s curriculum review and development process. Members of the Programs and Curriculum Unit (PCU) in the OVPAD are available to guide the unit through curriculum change submissions for elective courses.	Implemented , and Monitoring going forward
	4	“The MMI program was much improved with the integration of the internship after the last review; this outcome is a credit to the initiatives taken by the staff. We recommend it stay with this structure.” (p.7)	In the future, one avenue for building more exposure to entrepreneurship may be to work with IMI to develop an entrepreneurship elective (perhaps offered through ICUBE), which our students could take.	The program can also pursue funding opportunities to support special initiatives through the Priorities funding available within the	

				OVPAD, and the Provost's Innovation Fund (PIF).	
<p>The reviewers broadly observed a lack of clarity among program leadership and faculty regarding the identity and objectives of the MMI. They also noted a related lack of clarity around how the Institute for Management & Innovation (IMI) contributes to the success of the MMI, and how the MMI advances the mission of IMI. They emphasized that as similar professional master's programs continue to expand across the global educational landscape, "it will be ever more important to clearly articulate and disseminate the vision, value and impact of the program."</p>	5	<p>"Current admissions focuses on students with very good undergraduate academic records in their science and engineering courses. We recommend keeping this focus, expanding it to all STEM fields, but not farther afield. Expanding to all STEM fields may allow for some growth in the program and provide for more enrolment stability." (p.6)</p>	<p>Since the external review, we have been doing this. We have admitted students with degrees in mathematics, statistics, and computer science, and expect this to continue.</p>	<p>A full external review of IMI and all its programs will take place in Summer 2025.</p> <p>It is anticipated that this review will provide much needed guidance on the mandate of IMI as a unit and the vision and values of its programs.</p>	<p>Implemented, and Medium-term, following the outcomes of the upcoming external review of IMI.</p>
	6	<p>"More generally, we were not able to understand how IMI contributes to the success of MMI, which was developed independently of IMI, or how MMI advances the mission of IMI. To assess these issues, we believe it is necessary to have a clear sense of what UTM expects of IMI, and how IMI views its mandate with respect to these relationships." (p. 12)</p>	<p>IMI supports MMI event planning throughout the year, manages all space management and classroom booking requests, oversees financial administration, provides HR oversight as well as professional development, and supports sessional / TA hiring processes. IMI offers MMI students supports through an embedded wellness counsellor, registrarial and funding supports, student engagement opportunities through participation in the IMI Student Council, and access to the IMI graduate student lounge.</p>		
	7	<p>"This key issue would be appropriately explored in a strategic review of IMI. Without such a larger scale review, it is impossible for us to make recommendations on the future of IMI, and its relation to the evolution of MMI." (p.13)</p>	<p>There is currently a review of IMI planned to take place in 2025. As with point 6, we defer to the decanal level for a full response to this point.</p>		
	8	<p>"Longer term, as the number of these types of professional master's programs continues to grow and this segment of the educational market continues to become</p>	<p>The program will work with IMI to help define and articulate the program vision and benefits in a way that is synergistic with the vision and mission of IMI. IMI's recent annual report articulates its vision,</p>		

		more crowded, it will be ever more important to clearly articulate and disseminate the vision, value, and impact of the program.” (p.15)	mission and purpose. The main objective of the MMI program, which is to educate students with a background in science in management (with a focus on innovation management), supports IMI’s vision of “solving the world’s most complex challenges [to] make it a better place for all.” Going forward, we can also refine the program vision in a faculty and staff retreat.		
	9	“To better establish the program’s success, is it possible to survey students who decline offers or are not admitted, to learn more about the relevant market? Might it also be feasible over the years to track alumni and compare their career advancement to that of MBA’s in general and to other STEM graduates, including those who do and do not stay in STEM? Faculty in Management might well be interested in assisting with such an initiative. This kind of institutional research on an on-going basis might prove very useful in continuing to refine the program’s messaging and value proposition.” (p.16)	This prompt highlights an opportunity for institutional research on both alumni as well as students who decline our offers. At the program level, we interview applicants who may be above the bar for admission, and ask them where they have applied. We will begin tracking these answers and, after sending out offers, we will also track the number of acceptances relative to declines, and if a reason is given for a decline, note it down.	The OVPAD will support the program’s approaches to data-informed planning. The Academic Planning and Policy (APP) unit is also available to assist IMI with this planning.	Short-to-Medium term , through data gathering in the admissions process.
The reviewers highlighted significant overlap between the MMI and MBIotech programs, and suggested strategic structural consideration of how these programs might optimally interact going forward.	10	“We note that there is significant overlap between this program and the MBIotech program. Although we did not look at the MBIotech program in depth, we did wonder if it should in the future be folded into the MMI program, either directly or as a specialized stream within MMI.” (p.7)	We note two points of confusion in this prompt. First, the objectives, curricula and placements of the MBIotech and MMI programs are very different. Our understanding is that students in MBIotech place in laboratory jobs (especially in pharmaceutical companies) at a relatively high rate. In contrast, MMI is a more general degree that places students in technology management positions across a wide range of industries. The course and entry	The OVPAD supports the program’s understanding of the MMI and MBIotech curriculum and are pleased to now have a working MOU between IMI and UTMM. The OVPAD also anticipates that potential collaboration	Implemented , and Medium-term , following the outcomes of the upcoming external review of IMI.

			<p>requirements reflect this. MMI does not require students to take science courses, which MBIotech does. MMI students are, however, required to take courses on the economics of innovation, which is core to the program’s objective. This fundamental difference in objectives, courses and placements would make it difficult to fold the programs together.</p> <p>Second, the programs are structured very differently. MBIotech is a 24-month program, while MMI is a 12-month program. Integrating two programs of different lengths like this would also be challenging. The program emphasizes that the 1 year length of the MMI program is something our students value, and this is one of the key differentiators with respect to other programs.</p>	<p>and interactions between the MMI and the MBIotech programs will be more fully analysed in the upcoming review of IMI and its programs. Previously, these programs have been operating in isolation and it is our goal that the IMI review help to clarify the identities and highlight relationships and potential points of convergence.</p>	
<p>The reviewers observed that the MMI is extremely reliant on the UTM Department of Management for its continued success, which introduces significant concerns about the program’s long-term sustainability. They strongly recommended exploring approaches to ensuring the MMI’s continued stability, and especially to formalizing the program’s connection to</p>	<p>11</p>	<p>“Maintaining this convivial relationship with Management will be essential for success. We recommend continuing to have a MMI director from Management, and we strongly suggest that IMI should not hire its own management research faculty to support MMI, and instead continue to bring over Management faculty as is done at present.</p> <p>Beyond this, we would suggest that MMI be considered officially a joint program of Management and IMI. A formal relationship with Management will ensure that the</p>	<p>A relationship between these departments is already in place. After the external review, IMI and the Department of Management (UTMM) signed a Memorandum of Understanding, where the IMI Director and the Management Chair coordinate annually on teaching and related matters.</p> <p>The IMI Director and Chair of UTMM are building a culture of consultation to ensure that the needs of both units are being met, recognizing shared faculty appointments and joint responsibilities. Following the IMI review questions about further formalizing IMI/MMI’s relationship with UTMM can be revisited to determine hiring priorities with respect to MMI.</p>		

<p>Management. They further noted opportunities for the MMI to better leverage strengths of other faculty in the U of T ecosystem.</p>		<p>program and its staffing are more stable and more secure going forward.” (pp. 9-10)</p>			
	12	<p>“Although we have no indication that Management is considering withdrawing support, we do think that the program would be on a stronger footing if this relationship was institutionalized formally.” (p.13)</p>			
	13	<p>“The relationship between IMI and the Department of Management needs care and attention. The strategic plan for IMI should make clear how the institute adds value to Management, and does not compete with it or use MMI as justification for its own existence.” (p.14)</p>			
	14	<p>“We believe that the program could do more to leverage the strengths of other faculty in the U of Toronto ecosystem, and their interest in academic-industry links, to bring even more value to the program. Beyond this, MMI (and perhaps even IMI) could do more to be a convening force bringing together faculty, students, alumni, and industry partners. Clearly the internship poster session is one such moment, but we suggest going beyond this and having a second event annually, giving faculty opportunities to showcase their work to local industry.” (p.4)</p>	<p>The program agrees with the importance of building more industry-academic cooperation. This prompt will be explored further in a faculty/staff retreat.</p>	<p>The recently completed MOA with Management will support this recommendation, and will benefit the program by strengthening teaching relationships and introducing connections to industry.</p>	<p>Medium-term, following outcomes of the program retreat.</p>
<p>The reviewers cautioned IMI against pursuing attempts to increase enrolment in the</p>	15	<p>“The current class size is small, which is key to their demonstrated acquisition of excellent soft skills. We recommend not</p>	<p>This point is left for decanal consideration.</p>	<p>The OVPAD will invite recommendations from the upcoming external review to</p>	<p>Medium-term following outcomes of</p>

MMI, noting concerns about maintaining the high quality of the program.		expanding beyond 40 for the time being. If there is sufficient growth of the pool of applicants, perhaps in the future, a second section could be added and the program could have two classes of 30-40 each, but this might require additional staff.”		understand enrolment issues potential course pressures.	the upcoming review of IMI.
The reviewers encouraged the MMI, IMI and UTM to explore opportunities for more active and vibrant engagement with the local community, and with alumni.	16	“We also encourage the program to continue to build the relationship with industry partners and the alumni community, taking full advantage of alumni as enthusiastic supporters of the program and sources of contacts as they move up the ranks of the organizations they serve. Our understanding is that industry relations are currently handled by staff, but we feel more can be gained by including faculty as well. Making UTM more of an intellectual hub of the management of innovation would benefit the program, but also has the potential to be an interesting source of contacts for professors. In particular, we suggest holding at least one event a year that pulls together the larger MMI community –students, alumni, employers – with whom faculty can share their relevant research.” (p.10)	This was addressed in point 14 and will be raised in a faculty/staff retreat. The prompt about making “UTM more of an intellectual hub in the management of innovation” is something that could be addressed at the level of IMI and UTM-wide, along with the MMI program.	OVPAD looks forward to the outcomes of the program’s retreat and the potential for annual engagement events in IMI.	Medium-term, following outcomes of the program retreat.
	17	“Although we did not review IMI, we would encourage UTM to consider using this grouping of professional programs to have much more active and vibrant engagement with the local community and the community of alumni. Perhaps IMI can	The program is currently undergoing a consultative exercise at IMI to build out priorities for the next 5 years. These priorities are intended to help shape IMI’s role and future activities, including those related to engagement.		

		develop an effective role as a hub and convener within the local community, as MMI has started to do in its own academic area, and use this to leverage energy and engagement for the University and its network within the community. We think that MMI alumni could benefit from this expanded and energized network, and as well as benefit to faculty and visibility to UTM. We suspect that this might be a meaningful role for IMI that is more concrete and mission-aligned than what we heard during our conversations.” (p.13)			
Other recommendations not prioritized in the Request for Administrative Response	18	“Although this is not listed among the program evaluation criteria, we believe it should be important to document progress on diversity and equity in future surveys.” (p.6)	We agree with this recommendation and will implement it. Since the external review, IMI has developed an EDI committee as well as an inclusive language guide. This will be brought into MMI programming (along with all other IMI programs more broadly).	The OVPAD supports the program’s approach to this recommendation. The unit is also encouraged to communicate available scholarships via the School of Graduate Studies for Black and Indigenous scholars.	Short-term
	19	“The program benefits immensely from having a dedicated classroom. Students told us that they use this room for classes and group work during the day. However, we were struck by its lack of windows, its dull atmosphere relative to other much less intensively utilized spaces in the building, and its outdated technology including a “computer in a box” upfront. We suggest	We emphasize that classroom allocation and technology is a campus issue, not an MMI issue. We understand that IMI is working with UTM facilities on updating classrooms, as well as developing a centralized booking system, which may help alleviate this issue.	A new space allocation process is underway which will include faculty consultation. Facilities Management Planning and the Office of the Dean are working with IMI on this process.	Implemented

		that this room be updated if no more appropriate space can be found. It is very inappropriate for a program that prioritizes innovation.” (p.8)	IMI is currently working in collaboration with UTM to update and upgrade our classrooms, including layouts and technology		
	20	“There is clearly duplication of some services within programs across IMI. Also, there is limited capacity for staff development with the current structure. We would encourage that staff be given opportunities to expand their scope and professional development. For example, MMI has best in class management of internships, professional development programming, alumni management, and industry partner cultivation. We advise that these competencies be leveraged more widely across UTM.” (p.12)	<p>This point suggests an opportunity for cross-program sharing within IMI and perhaps UTM-wide. In a staff retreat or in individual meetings, the program director will connect with staff about professional development to ensure their needs are being met. Across IMI, we promote staff career growth through reclassification.</p> <p>IMI offers regular professional development and training opportunities to its staff. We are examining our organizational structure in an effort to coordinate at the unit-level and reduce duplication where possible, and IMI is eager to share our expertise across the campus and the university through shared reports, presentations, consultation and committee participation.</p>	The OVPAD will invite recommendations from the upcoming external review to understand professional development opportunities and support for staff.	Medium-term following outcomes of the upcoming review of IMI.

Vice-Principal Academic and Dean

	21	<p>“We have concerns if IMI begins hiring tenure track staff that they be at the academic level of faculty in academic departments, and aligned with their disciplinary priorities. It is important that new hires not be seen as second class upon arrival. We would suggest joint appointments with full access to mentoring and development within IMI and also within their disciplines. If IMI cannot offer such full support and joint appointments to tenure track faculty, we would strongly urge that IMI make only teaching track appointments.” (p.14)</p>	<p>Since IMI became an EDU-A in 2020, tenure stream faculty members who hold joint (and often non-budgetary) appointments in a range of disciplinary units and whose scholarship is internationally recognized have become 100% IMI faculty members. Junior faculty members are mentored at IMI and through other opportunities across UofT designed to train emerging scholars. IMI also is home to excellent teaching stream faculty. As an EDU-A, it is critical for IMI to build a faculty complement of engaged researchers and scholars.</p>	<p>As an EDU-A, IMI currently has both cross-appointed faculty and full appointments. IMI is eligible for faculty complement plan requests. The OVPAD will work with the unit on assessing needs for qualified research or teaching stream.</p>	<p>Short-term: OVPAD will assist the unit with complement planning relative to academic needs and the criteria for submitting proposals for new hires.</p>
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3 Committee on Academic Policy & Programs (AP&P) Findings

The spokesperson for the reading group reported that the review summary accurately described the full review. The reading group reported that the Dean's administrative response had adequately addressed most of the issues identified by the review, however, noted the omission of space allocation for staff and that many concerns raised by reviewers would be addressed during an upcoming faculty/staff retreat. The reading group reported that an external review of IMI and its programs was scheduled for Summer 2025, and perceived this as an opportune checkpoint to assess the progress made in response to recommendations. The reading group asked the Dean to further comment if there was an established timeline for the faculty/staff retreat and if there were initiatives to increase the enrollment of engineering students to extend the program's scope to encompass all STEM fields and engineering firm internships to boost enrollment given the potential growth and enhanced enrollment stability.

Nick Rule, Vice-Principal (Academic) & Dean, University of Toronto Mississauga clarified that staff alternated their days of work and thus had access to hoteling options and opportunities to access communal office spaces to conduct private meetings. He also confirmed that the retreat was planned for the Fall. The program appealed to engineering students who were transitioning away from their engineering disciplines into other fields. These were students that graduated with a bachelor's degree in engineering and sought gainful employment, thus the program attracted students that were interested in doing something different outside of engineering. This contributed to the lack of engineering firms for internships.

A member inquired if the administration had plans to increase the number of engineering students to which Shauna Brail, Director, Institute for Management and Innovation responded that they recruited from engineering programs on an annual basis. She noted that the program received few applications, due to the fact that there were specialized professional master's programs for engineering graduates, and that engineering graduates at the undergraduate level went directly into the workforce.

Matthew Osborne, Director, Master of Management of Innovation Program, noted the trend in the decline in engineering students over the last few years was driven by changes in the labour market. There were increases in other technical business programs, such as Rotman's management and data analytics program which attracted engineering students. They had increased staff and remedial support to help students who experienced challenges with the technical aspects of the program due to the drop in engineering students. He noted the positive feedback from these initiatives and reiterated that recruiters actively participated in engineering fairs and proactively sought engineering students. Professor Osborne concluded by noting that he would raise this at the next faculty retreat to explore further.

No follow-up report was requested.

4 Institutional Executive Summary

The reviewers praised the program as extremely successful; observed it is clearly meeting its goals, financially stable, and very healthy. It has enhanced relations between local innovative firms and the Campus, that have potential to grow more valuable over time. The admissions process is thoughtful and holistic, and its focus on recruiting students from STEM fields is noted as a “nice niche” for the program. Experiential learning is embedded in a number of courses and curricular offerings are generally excellent; class sizes are small, which is noted as key to students’ development of “soft skills”. Professional development programming is thoughtful and well-designed, and internship matching is done carefully. Current students and alumni appear very diverse, are extremely impressive, and share a common positive and mutually supportive culture; and students appreciate the value of a program that targets individuals with more technical backgrounds. Finally, the reviewers noted that staff are very strong, and committed to supporting the program and its students; faculty (primarily drawn from the UTM Department of Management) are also very strong; and the program enjoys excellent morale and relationships among students, faculty and staff.

The reviewers recommended that the following issues be addressed: maintaining excellence in and/or enhancing the MMI curriculum by: addressing student workload concerns in the first semester by examining the sequencing of courses, encouraging/enhancing entrepreneurial activity, and avoiding any reduction of the program’s experiential learning components; enhancing clarity regarding the identity and objectives of the MMI, and around how IMI contributes to the success of the MMI and vice versa; strategically addressing significant overlap between the MMI and MBiotech programs; exploring approaches to ensuring the MMI’s continued stability, and especially to formalizing the program’s connection to Management; avoiding attempts to increase enrolment in the MMI; and exploring opportunities for more active and vibrant engagement with the local community, and with alumni.

The Dean’s Administrative Response describes the Faculty and programs’ responses to the reviewers’ recommendations, including an implementation plan for any changes necessary as a result.

5 Monitoring and Date of Next Review

Progress checks and monitoring of the implementation plan will occur through the Director’s Annual Report to the Dean.

This review was considered alongside the response to the review of the Master of Science in Sustainability Management (MScSC), which was held in 2023. In discussions related to the reviews of both the MScSC and MMI, it became evident that future reviews of programs offered by the Institute for Management & Innovation would benefit from reviewers understanding the context of the unit and all its programs, rather than assessing programs on an individual basis. The next external review of the MMI will take place in Summer 2025, alongside a review of the Institute for Management and

Innovation and its programs. This review's timing will serve as an Interim Monitoring Report for the present review.

6 Distribution

On June 30th 2024, the Final Assessment Report and Implementation Plan was posted to the Vice-Provost, Academic Programs website and the link provided by email to the Vice-Principal Academic and Dean of UTM, the Secretaries of AP&P, Academic Board and Governing Council, and the Ontario Universities Council on Quality Assurance. The Dean provided the link to unit/program leadership.