



REVIEW OF THE MASTER OF MANAGEMENT IN ANALYTICS  
DESAUTELS FACULTY OF MANAGEMENT

PROGRAM RESPONSE & ACTION PLANS

MAY 2023

Submitted to the Office of Academic Reviews by:  
Prof. David Saunders  
Acting Academic Director, Master of Management in Analytics

Academic Review Year: 2022-2023  
Master of Management in Analytics  
Desautels Faculty of Management  
**Stakeholder Meetings: March 28, 2023**

## **I. Program's Overall Assessment of the Review Committee Report**

The University Review Committee was very professional and asked good questions. We feel that the process would have benefited from two things: (1) that a member of the review committee came from a private program; and, (2) that there was an opportunity for the program directors to meet with the review committee at the conclusion of their day to respond to any concerns that they may have.

## **II. Recommendation Action Plans**

*Please ensure to provide an Action Plan and Timeline for each recommendation. If the Program does not support a recommendation, please explain clearly the reason(s).*

<b>Recommendation</b>	<b>Action Plan</b>	<b>Reason(s) for Non-Implementation</b>	<b>Timeline</b>
<b>1. Program Structure &amp; Content</b> <b>A. Greater attention is needed to articulate more clearly the purpose, value and importance of the business pillar and to align advertised coursework opportunities with actual course offerings.</b> Given the diversity of educational backgrounds among entering students, it is necessary that different forms of business education be available to different students; nonetheless it should be possible to state and achieve some overall set of business-education goals. Students entering with technical backgrounds and skills need to develop a clear sense of the kinds of problems to which these skills can be	A. The subcategories in the pillars will be more distinctly highlighted on the website.  Further optional courses that could be added to the curriculum include Project Management and Negotiations. In order to do so, we would need to increase the number of		A. Material on the website to outline this pillar better will be implemented before next recruitment cycle.

<p>applied.</p>	<p>students because the current courses are in high demand from the market and likely would not be cut. We will discuss increasing the program size with the Dean.</p> <p>The organization/ summarization of business impact will be better explained to students. For example, in the Capstone class, the team is responsible for showing business drivers of an analytics project and how it drives topline/ bottom line metrics for their clients, which is the root of business learning. Because this is weaved into a single project course, it may be less formally recognized as part of the business pillar.</p> <p>To ensure that students understand the ‘business landscape’ at the beginning of the program, the addition of a 1.5 credit course will be explored, as well as a 1.5 credit final class to synthesize their learnings at the end of the program.</p>		
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<p><b>B. A curricular review may be beneficial as a means to reduce repetitiveness and/or redundancy between courses (a point mentioned to the committee as a concern), to identify where gaps exist and what courses or areas of interest could be developed to address those gaps, and to further strengthen the program with offerings in new directions (possible examples include project management and marketing).</b> One area of persistent concern that can be addressed is the availability of courses from other Master's programs (MBA, MMF) to the MMA students: is there any misleading advertising, on the website or otherwise, about the genuine availability of such courses to MMA students? Are all of the elective courses listed available in practice? What constraints are keeping them from filling knowledge gaps via these other program offerings?</p>	<p>B. Curricular reviews are a natural part of program evolution. We planned for 5yr review cycles, for which we are now entering our first curriculum review.</p> <p>The feedback of the repetition of topics has come up from previous cohorts. Upon review, the faculty members have assessed that a certain level of repetition is valuable for deeper understanding of core topics (python coding techniques) as well as different multiple dimensionality of certain topics that are covered from different perspectives (ie regression modeling may seem like a similar topic but can be applied in many ways). However, we will examine the level of overlap once again with an eye to reducing this overlap where it is not needed.</p> <p>Regarding offering other courses from other programs, the challenges for this are twofold: 1) the schedules do not align for all programs (ie all have</p>		<p>B. We are planning to do a curriculum review this year to have recommended changes/updates for May 2024 intake year.</p> <p>Promotional and program materials will be reviewed before the next recruitment cycle to ensure that we do not promise what we cannot deliver.</p>
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	<p>different start/end dates for terms; and 2) skill sets must be monitored reviewed as admission criterion are quite different for each program.</p> <p>For instance, courses in the Masters of Finance program require a much deeper knowledge of finance than is required in the MMA program.</p>		
<p><b>C. The Capstone Project opportunity, while viewed positively, would benefit from greater clarity in the process of matching students to partners to ensure students are able benefit from opportunities well suited to their interests and career ambitions.</b> Some confusion was expressed by students concerning the process by which individuals were assigned to firms, and the basis for those assignments; there is evidently a wide disparity in the student experience. It appears that eventual employment with the capstone partner is a common outcome, so that assignment may be a critical factor in a student's career progression; this being so, consideration for student goals could be addressed more transparently in forming matches. This may be especially important for those students with less working experience and for whom this project may play an especially large role in career outcomes.</p>	<p>C. It is made clear during the recruitment process that student teams are assigned with the goals of team balance, diversity of skills, and client project performance.</p> <p>Students are also told that clients vary from year to year and that no company nor industry can be guaranteed.</p> <p>At the beginning of the Capstone class students are told that the goal of the Capstone is to gain consulting experience and not for job placement. Students are encouraged to build consulting acumen</p>		<p>C. We will work to increase the transparency of the process of assigning students to teams in the Capstone Project and implement this by the next version of the course.</p>

	<p>even in a field that they are unfamiliar with so that when they apply their consulting skills to their field of choice they can potentially go even deeper.</p>		
<p><b>2. Administrative Support.</b> Administration of the program appears to be effective. The committee noted with approval the recent hiring of an additional member of the administrative support team, which in addition to dealing with current workload provides greater resilience. While the roles of administrative staff were highlighted as a positive aspect of the MMA program, the review committee recommends that the administrative structure also intentionally address cross training and other means of coping with potential unexpected change; given the current labour market, it is conceivable that administrative staff could leave their positions. The MMA program is an intensive environment demanding a high level of staff engagement with applicants, and an administrative absence could be profoundly felt if no administrative staff sustainability plan is in place.</p>	<p>Thank you for recognizing that MMA staff are performing at a high level. The program instills vertical experiences of a program cycle, and the Faculty gives horizontal support to staff members who can cover on similar tasks.</p> <p>Support/Training has also been given on a need-by-need basis and there is a move to have more year-long planning for peak/non-peak times of the program.</p> <p>We agree that cross training is a good way to manage</p>		<p>Discussion about administrative support is on-going and we hope to reach agreement on changes by the end of the summer.</p>

	unexpected change. We are working with the Vice-Dean (Programs) to increase the strength of the administrative structure and frequency of cross-training.		
<b>3. Keeping program content up to the minute</b> Given that the current technology is a necessity in the MMA program and in consideration of the accelerated timeline of the program. The review committee recommends that a concrete plan be articulated that will ensure that the MMA program is able to keep up with a rapidly evolving industry. A number of comments were received suggesting that the program was already lacking in some areas. While members of the committee do not have the expertise to evaluate suggestions as to particular areas for development, one point that emerged on several occasions was the rapid movement toward cloud-based technologies and 'data engineering', coupled with a sense (justified or not, we cannot say) that the program needs to move more quickly to adapt in this direction.	We conduct regular topic and software reviews with our MMA Advisory Board and Advisory Council consisting of members from the industry.  For instance, we have recently added more Cloud Computing components into our classes (ie Enterprise analytics and NLP using Cloud Technologies). We will continue to make annual updates.  Technology is fast evolving, and time is needed to see what becomes widely adopted before learning and building materials for faculty to utilize and teach. Once established we plan to incorporate into curriculum, but faculty training may also need to be supported. We will encourage faculty to address this constraint by taking advantage of recently launched Desautels teaching		On-going

	grants that enable faculty to refresh their skillsets and knowledge.		
<b>4. Student Admission &amp; Selection</b> Given that EDI is a priority area for the faculty, EDI consideration in the student admission and selection should be clear and transparent, including the manner in which EDI is considered at each stage of the process. The review committee recommends articulating EDI goals clearly for students so that they are aware of these prior to applying to the MMA program. Further, it would be worthwhile to review what is stated about assessment criteria for admission, to ensure that this is sufficiently clear to allow prospective students to prepare their admission materials appropriately.	Diversity is a major goal of both the Faculty and program. We consider diversity in multiple factors including education, maturity, experience variety, leadership potential etc. Even though we do actively state this in our admissions process, we will make this clearer in our communications.  Along these lines, we monitor historical statistics about acceptances from various regions, communities, education backgrounds etc.  We will collaborate with the Marketing, Recruitment and EDI teams at Desautels Faculty of Management to identify and articulate sustainable goals for the MMA program.		We will review what is stated about assessment criteria for admission and plan to complete this by the end of the summer.
<b>5. Future Programming</b> While the Review Committee applauds the efforts of faculty leadership in considering the viability of an online program, the review committee recommends advancing thoughtfully on this front so as not to compromise the integrity of the program. A market	We are in full agreement that the integrity and high standing of the current program should not be		On-going.



<p>analysis may be needed to justify this programmatic option, together with a credible plan to ensure that the university's academic standards are maintained.</p>	<p>compromised as we look to expand and diversify our delivery modality.</p> <p>As this is a new initiative, we have been planning this since the beginning of the pandemic with the greater acceptance of online learning by the market.</p> <p>We are currently in the process of internal and external approval processes to ensure that the university's academic standards are maintained. Once the new delivery modality is approved, we will request that Teaching and Learning Services (TLS) and online content development professionals, in tandem with faculty responsible for the online course offerings, transform our strong content for the new delivery channel.</p>		
<p><b>6. Teaching</b></p> <p>While the quality of teaching is generally viewed positively, there is some suggestion of a mixed degree of engagement on the part of external lecturers, possibly exacerbated by evening classes in which both lecturer and students are simply tired. It is difficult for the review committee to judge this concern, but one suggestion that we heard was that of additional direct</p>	<p>The difficulty in delivering such and intense program in 12 months is well understood by the program and faculty. In order to accommodate this</p>		<p>On-going.</p>

scrutiny and observation of the teaching, particularly that of the professional lecturers.	challenging timeline, we do schedule some courses during evenings. We understand this challenge and will limit the number of courses offered during evenings. We will also continue to carefully select the professional lecturers in our classrooms.		
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### III. Other Comments from the Program:

The program and Faculty appreciate the work and feedback provided by the University Review Committee and the various stakeholders involved. Although the program is ranked among the Top-10 globally, we are constantly looking to improve the level of academics and learning delivered, the way we operate, and the contribution to the students and community. The privatized programs also have a profit mandate that creates an additional factor of consideration and that we suggest should be factored in more concretely. That being said, the level of academics, learning and University reputation will always be our top priority.

The program also spends a significant amount of time/effort to build a wealthy extra-curricular student experience. Initiatives like orientation, Advisory Boards, networking events, extra seminars, and community activities should be given an important level of consideration and recognition. The strong results that have come from our Career Services has also come not by chance but by thinking outside-the-box to connect the dots for not only students but also for industry. We spend a considerable amount of time teaching companies how they should approach the next generation of analytics professionals and think about building a more sustainable talent pipeline.

The MMA program staff should really be commended for the work they do and results that they help achieve, without which our programs would not be as successful as they are. They have a heavier load than average in the following manners: 1) the higher proportion of international students requires more training/work/stress on student affairs staff during admissions and onboarding processes; 2) the MMA Program covers 45 credits of non-theses courses in a short 12 months period, which is likely more than other areas; 3) the importance on experiential learning and industry connections requires greater training, versatility and variation. We feel that this extra work should come with greater recognition.

Finally, we are building a program that combines a number of disciplines into one, and all of which are meant to have an equal part. This brings challenges in what we may consider as consistent teaching (e.g., quantitative methods versus coding versus business

strategy). Data science and analytics is also a field where there is still a high degree of variation about standards, market needs and best practices, thus the objectives of 'staying a top of trends' is a hard to define and is a constantly moving target. We begin our program by telling our students that they can only learn so much in 1 year with us, but that we try to set them up with the skills of life-long-learning that they should focus on. We suggest greater importance on this, rather than trying to try to cram everything into the 1 year of the program. As a young program, we now have alumnus who can contribute to this, and we are building this through our MMA Ambassadors group, and hope this can be seen in the overall work that we do.



ACADEMIC REVIEW OF THE  
MASTER OF MANAGEMENT IN ANALYTICS PROGRAM

DEAN'S RESPONSE

JULY 2023

Submitted to the Office of Academic Reviews by:  
Prof. Yolande Chan  
Dean, Desautels Faculty of Management

Academic Review Year: 2022-2023  
Master of Management in Analytics Program  
Desautels Faculty of Management  
**Stakeholder Meetings: March 28, 2023**

## **I. Dean's Overall Assessment of the Review Committee Report and Unit Response**

I appreciate the committee's review and report. The committee identified opportunities for increased clarity in communications and processes, and provided helpful additional student and faculty feedback to the MMA program leadership. While much of the information was previously known, it was helpful to have it be summarized and shared, especially in a time of MMA program leadership transition. I thank the reviewers and the Office of Academic Reviews.

## **II. Review Recommendations**

<b>Recommendations Accepted by the Unit</b>	<b>Dean Accept Y or N</b>	<b>Is the Action Plan feasible in the current fiscal climate? Y or N</b>	<b>If No, please indicate the reason(s).</b>
<b>1. Program Structure &amp; Content</b> <b>A. Greater attention is needed to articulate more clearly the purpose, value and importance of the business pillar and to align advertised coursework opportunities with actual course offerings.</b>	Y	Y	

<p>Given the diversity of educational backgrounds among entering students, it is necessary that different forms of business education be available to different students; nonetheless it should be possible to state and achieve some overall set of business-education goals. Students entering with technical backgrounds and skills need to develop a clear sense of the kinds of problems to which these skills can be applied.</p>			
<p><b>B. A curricular review may be beneficial as a means to reduce repetitiveness and/or redundancy between courses (a point mentioned to the committee as a concern), to identify where gaps exist and what courses or areas of interest could be developed to address those gaps, and to further strengthen the program with offerings in new directions (possible examples include project management and marketing).</b></p> <p>One area of persistent concern that can be addressed is the availability of courses from other Master's programs (MBA, MMF) to the MMA students: is there any misleading advertising, on the website or otherwise, about the genuine availability of such courses to MMA students? Are all of the elective courses listed available in practice? What constraints are keeping them from filling knowledge gaps via these other program offerings?</p>	Y	Y	
<p><b>C. The Capstone Project opportunity, while viewed positively, would benefit from greater clarity in the process of matching students to partners to ensure students are able benefit from opportunities well suited to their interests and career ambitions.</b></p> <p>Some confusion was expressed by students concerning the process by which individuals were assigned to firms, and the basis for those assignments; there is evidently a wide disparity in the student experience. It appears that eventual</p>	Y	Y	

employment with the capstone partner is a common outcome, so that assignment may be a critical factor in a student's career progression; this being so, consideration for student goals could be addressed more transparently in forming matches. This may be especially important for those students with less working experience and for whom this project may play an especially large role in career outcomes.			
<b>2. Administrative Support.</b> Administration of the program appears to be effective. The committee noted with approval the recent hiring of an additional member of the administrative support team, which in addition to dealing with current workload provides greater resilience. While the roles of administrative staff were highlighted as a positive aspect of the MMA program, the review committee recommends that the administrative structure also intentionally address cross training and other means of coping with potential unexpected change; given the current labour market, it is conceivable that administrative staff could leave their positions. The MMA program is an intensive environment demanding a high level of staff engagement with applicants, and an administrative absence could be profoundly felt if no administrative staff sustainability plan is in place.	Y	Y	
<b>3. Keeping program content up to the minute.</b> Given that the current technology is a necessity in the MMA program and in consideration of the accelerated timeline of the program. The review committee recommends that a concrete plan be articulated that will ensure that the MMA program is able to keep up with a rapidly evolving industry. A number of comments were	Y	Y	

received suggesting that the program was already lacking in some areas. While members of the committee do not have the expertise to evaluate suggestions as to particular areas for development, one point that emerged on several occasions was the rapid movement toward cloud-based technologies and 'data engineering', coupled with a sense (justified or not, we cannot say) that the program needs to move more quickly to adapt in this direction.			
<b>4. Student Admission &amp; Selection.</b> Given that EDI is a priority area for the faculty, EDI consideration in the student admission and selection should be clear and transparent, including the manner in which EDI is considered at each stage of the process. The review committee recommends articulating EDI goals clearly for students so that they are aware of these prior to applying to the MMA program. Further, it would be worthwhile to review what is stated about assessment criteria for admission, to ensure that this is sufficiently clear to allow prospective students to prepare their admission materials appropriately.	Y	Y	
<b>5. Future Programming</b> While the Review Committee applauds the efforts of faculty leadership in considering the viability of an online program, the review committee recommends advancing thoughtfully on this front so as not to compromise the integrity of the program. A market analysis may be needed to justify this programmatic option, together with a credible plan to ensure that the university's academic standards are maintained.	Y	Y	The MMA program leadership are advancing thoughtfully while presenting a strong argument not to delay the implementation of the online program. A 2024 start is now envisioned.
<b>6. Teaching</b> While the quality of teaching is generally viewed positively, there is some suggestion of a mixed degree of	Y	Y	



engagement on the part of external lecturers, possibly exacerbated by evening classes in which both lecturer and students are simply tired. It is difficult for the review committee to judge this concern, but one suggestion that we heard was that of additional direct scrutiny and observation of the teaching, particularly that of the professional lecturers.			
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<b>Recommendations Not Accepted by the Unit</b>	<b>Do you agree with the Unit's Decision? Y or N</b>	<b>If No, indicate reason(s) for the Unit to reconsider</b>
N/A	N/A	

### **III. Additional Comments**

N/A