

Final Assessment Report

Bachelor's in Global Business and Digital Art (BGBDA) and Master's in Digital Experience Innovation (MDEI)

October 2020

Executive Summary

External reviewers found that the programs (BGBDA, MDEI) delivered by the Stratford School of Interaction Design & Business were in good standing.

“As the external reviewers we found that these programs are in overall good standing. The undergraduate Bachelor's in Global Business and Digital Arts (BGBDA) is an excellent program, managing a complex interdisciplinary curriculum which leads to a very high job placement one year after graduation (above 92%). The Masters in Digital Experience Innovation (MDEI) is also in overall good standing [...].”

A total of 16 recommendations, touching on curriculum development, student life, and improving the nature of the satellite campus, were provided by the reviewers. In response, the program created a plan outlining the specific actions proposed to address each recommendation as well as a timeline for implementation. The next cyclical review of these programs is scheduled for 2025-2026.

BGBDA: First Year Enrolment

2017/18	191
2016/17	162
2015/16	123

MDEI: New Enrolment

2017/18	26
2016/17	18
2015/16	28

Background

In accordance with the University of Waterloo's Institutional Quality Assurance Process (IQAP), this final assessment report provides a synthesis of the external evaluation and the internal response of the programs (BGBDA, MDEI) delivered by the Stratford School of Interaction Design & Business. A self-study (Volume I, II, III) was submitted to the Associate Vice-President, Academic and Associate Vice-President, Graduate Studies and Postdoctoral Affairs on September

17, 2018. The self-study (Volume I) presented the program descriptions and learning outcomes, an analytical assessment of the programs, including the data collected from a student survey, along with the standard data package prepared by the Office of Institutional Analysis & Planning (IAP). The CVs for each faculty member with a key role in the delivery of the program(s) were included in Volume II of the self-study.

From Volume III, two arm's-length external reviewers were selected by the Associate Vice-President, Academic and/or Associate Vice-President, Graduate Studies and Postdoctoral Affairs: Dr. James Nadler, Professor and Chair, School of Creative Industries, Ryerson University, and Dr. Stanley Reucker, Professor, Department of Art and Design, University of Illinois.

Reviewers appraised the self-study documentation and conducted a site visit to the University on December 3-4, 2018. An internal reviewer from the University of Waterloo, Dr. Bill Power, Associate Professor and Chair, Department of Biology, was selected to accompany the external reviewers. The visit included interviews with the Vice-President, Academic & Provost; Associate Vice-President, Academic and Associate Vice-President, Graduate Studies and Postdoctoral Affairs; Dean of the Faculty of Arts; Director and Associate Directors of the Stratford School; as well as faculty members, staff and current students. The Review Team also had an opportunity to meet with representatives from the Library and Co-operative Education.

This final assessment report is based on information extracted, in many cases verbatim, from the self-study, the external reviewers' report and the program response.

Program characteristics

Bachelor of Global Business and Digital Arts (BGBDA): BGBDA is a four-year, direct entry program that combines creativity, technology and business competencies. Students spend the first year at the main University of Waterloo campus and then take all required courses and electives at the Stratford School in years two, three, and four. The combination of digital media and global business has opened up new global markets and business opportunities, but also entails a complex network of political, ethical, environmental, and ultimately humanistic concerns. Given the need to develop thoughtful and critically-informed citizens of a global digital culture, BGBDA provides students with a combination of global awareness and digital design skills that will position them as mindful leaders and transformers of 21st century business, government, and culture.

Master of Digital Experience Innovation (MDEI):

MDEI is a one-year (full-time) or two-year (part-time) professional degree targeting recent graduates as well as mid-career professionals. The MDEI program offers a unique combination of creativity, technology and business in one professional degree that allows students to:

- Develop team and project management skills, as well as leadership skills
- Connect with industry mentors and work on major projects from concept to completion
- Gain basic technical skills of digital products and implementation
- Enjoy a flexibility of full-time or part-time studies, with courses offered in the early evenings

Summary of strengths, challenges and weaknesses based on self-study

Strengths

- The Global Business and Digital Arts program has seen unanticipated growth. When the program was launched, the estimated annual intake was 60 students. This target has been exceeded year over year. The current target is 180 students (150 domestic and 30 international).
- The mandatory internship for BGBDA students between the third and fourth year is one of the highlights of the program because they are able to gain valuable professional experience.
- The job placement rate for MDEI graduates one-year post-graduation is 92% of graduates are successful in finding employment in their field. This indicator serves to confirm that students are able to successfully complete the program and be career-ready.

Challenges

- Creating an undergraduate student community in Stratford has been a challenge in that students are reluctant to relocate to Stratford after their first year of study.
- MDEI is deemed a professional degree program and, thus, MDEI students have been historically excluded from the internal applicant pool for Ontario Graduate Scholarships. This is problematic because MDEI is a course-based Master's program like many course-based Master's programs in the Faculty of Arts.
- The Stratford Campus does not have a dedicated graduate student space, though effort is made to schedule the MDEI classes on the third floor of the building in order to afford graduate students the option of using the collaborative space and project rooms on that floor.

Summary of key findings from the external reviewers

The external reviewers found that these programs are in overall good standing. The undergraduate Bachelor's in Global Business and Digital Arts (BGBDA) is an excellent program, managing a complex interdisciplinary curriculum which leads to a very high job placement one year after graduation (above 92%). The Masters in Digital Experience Innovation (MDEI) is also in overall good standing, although there seems to be some frustration reported by the faculty about

whether the program is providing the career acceleration its candidates seek. On the other hand, the Master's candidates seemed quite satisfied with the MDEI.

The School's faculty and staff exhibit admirable comradery and passion for the two programs and their students. It was an important and positive step for the Stratford campus to obtain the status of a School in the Faculty of Arts. This will allow the School to continue to develop its faculty, research capability and impact and curriculum. The academic progression of a student through both the BGBDA and MDEI is highly prescribed but, at the same time, very clear.

In the eyes of the external reviewers, the top priority that the School should address is how to best deal with the issues and challenges arising from the School being a satellite campus in the smaller tourism-based center of Stratford. It is a 40-45 minute commute to the main campus of the University of Waterloo and employment and co-op opportunities in Kitchener / Waterloo, and about two hours from Toronto.

Program response to external reviewers' recommendations

Recommendations

1. Transportation for students needs to be improved from Waterloo. Since the cancellation of the Greyhound line there is no public transportation service between Kitchener-Waterloo and Stratford. The proposed addition of a GO-Bus service would make a significant difference.

Response

Students who reside in Stratford have expressed a feeling of isolation and lack of transportation to travel back to Waterloo for academic and other purposes. There is a regular shuttle service to/from Stratford and Waterloo on Fridays. However, the School now runs additional small shuttle buses from Stratford to Waterloo and back on Wednesdays and Sundays.

The City of Stratford is actively pursuing a partnership with Metrolinx to begin GO Train service to/from Stratford. This would benefit not only our campus population, but also the greater Stratford community. The City of Stratford is also investigating the possibility of adding three new bus routes; one of these will provide transportation between Kitchener/Waterloo and Stratford. It is hoped that these routes will be implemented in April 2020, providing students and faculty an additional method of transportation between the cities. Though neither of these solutions address the transportation issue fully, they are a step in the right direction for our student community.

2. As many students will continue to commute from Waterloo, avoid wherever possible the scheduling of evening classes especially in winter term. This is a safety issue as the backroads are treacherous in the snowbelt. Faculty members report that their cars often left the road for the ditch in the winter. Currently, only one faculty member lives in Stratford and the others split their time between the Stratford campus and the departments at Waterloo where they are cross-appointed.

Response

In the past, the programs have been small enough to avoid scheduling evening classes. However, more recently, evening classes are necessary to accommodate the growing number of students. The School will continue to monitor the scheduling of evening classes during the Winter term.

As of fall 2019, all undergraduate and graduate students, except for first year students, will be at the Stratford School full-time. Students will take required courses and electives at the Stratford School. We are confident that this will contribute to a positive change in the student culture and a greater buy-in by students to reside in Stratford.

Since undergraduate students spend their first year of their program at the University of Waterloo campus, it was never feasible to build a student residence in Stratford. However, the School has been actively working with a private developer who will complete attractive and affordable student living in close proximity to the campus by winter 2020. A significant number of students have expressed interest in renting accommodation in this new space.

As of fall 2020, there will also be a total of 100 new beds added to the off-campus housing inventory in Stratford. Currently, Stratford has its own menu tab on the UW off-campus housing website to ensure that residence options are advertised to students.

Concerns about road conditions voiced by faculty members will also be addressed through the careful monitoring of scheduling evening classes.

3. Improve the administrative connection with the Waterloo main campus. Students and faculty seem to have a sense of isolation. In other words, recognize and fully accommodate the satellite nature of the school.

Response

The School believes that obtaining the status of a School within the Faculty of Arts (as of July 1, 2018) will foster clearer, stronger, and well-defined connections with the Faculty of Arts and the central administration at UW. Establishing Stratford as a School has removed

ambiguity and lack of clarity for those in charge of the Stratford School. Previously, the Stratford Programs were not administered or delivered by an academic unit, such as a department or a school. Therefore, aspects of administration fell outside of university policy and were problematic to handle. Creating a distinct administrative unit gives faculty and students an increased sense of belonging to a community and might decrease the sense of isolation.

4. Establish a Program Advisory Board drawn from industry and government of experts who could serve as program advisors, employers, and potential donors. This will help the programs avoid falling behind industry trends.

Response

The suggestion to establish an advisory board drawn from industry, government and faculty experts is very much appreciated. The School agrees with the reviewers that such a body would help us identify gaps and weaknesses in the program in order to avoid falling behind industry trends. We will establish a Program Advisory Board that will consist of a small group of interested industry, government and faculty experts who will meet annually to address specific curricular questions pertaining to the undergraduate and graduate programs.

5. Develop program outcomes that are explicitly keyed to individual course learning outcomes and deliverables: a course mapping exercise. The Center for Teaching Excellence can help to organize this. Tie this back to the messaging of the program. We suggest that the School consider specific program outcomes for MDEI and how they differ from the undergraduate program.

Response

Although the learning outcomes for both programs are expressed quite well, what is lacking is a clear definition of learning goals. The School is aware of this gap and has made the articulation of learning goals for BGBDA a priority for the School's curriculum committee. The curriculum committee conducted one session led by the Center for Teaching Excellence to begin the process of defining learning outcomes that are specifically keyed to individual course learning outcomes and deliverables, which are defined in individual course syllabi. The curriculum committee then continued to meet to complete this task (see Appendix A).

For MDEI, we established an ad-hoc committee that accomplished the same task (see Appendix B).

6. We appreciate that the School conducted a major curricular review two years ago. Allow the current curricular changes of two years ago to play out and be analyzed for a year or two before tackling any further major changes.

Response

As discussed in recommendation 5, the program has developed detailed learning outcomes that are tied to the deliverables of the program (see Appendix A). Curricular changes made two years ago will be re-analyzed in two years' time, before any other major changes will be made.

7. We suggest that the School strongly consider, if at all possible, extending the summer internship into a full co-op option.

Response

Both reviewers felt very strongly about extending the one-term internship for BGBDA students into a full co-op option. BGBDA students consider the mandatory internship between their third and fourth year as one of the highlights of the program because they are able to gain valuable professional experience. The School agrees that in order to enhance the experiential learning experience for students, creating a full co-op option would be highly beneficial for the program and the students for the following reasons:

- post-degree employability and personal awareness vis-à-vis the workplace;
- enhanced professional development education: with a minimum of three co-op terms, students would be able to experiment with more than one potential career path providing them with a much clearer idea of the future direction they wish to take post-graduation;
- employer demand: a recent employer survey showed that employers seek BGBDA students for more than one term, citing the unique skill set that these students bring;
- recruitment: co-operative education is UW's brand. Adding a full co-op option to BGBDA would attract even higher numbers of outstanding applicants to the program.

The CEE is currently working on a feasibility study with the aim of implementing this change for the 2021-2022 academic year (see Appendix C for summary of Co-op proposal).

8. Continue to expand the business side of the curriculum, especially dealing with finance.

Response

An introductory course in business financials (GBDA 311) has been added to the BGBDA curriculum and will be offered for the first time in the 2020-2021 academic year.

9. Explore opening up more electives to allow students to specialize more than is currently possible in a highly prescribed undergraduate program. We would suggest allowing undergraduates in third year be allowed to take two or three electives within BGBDA. This would allow those interested students to explore business or design in more depth.

Response

As part of the new curriculum that launched in 2018-19, BGBDA students will be offered one elective in 2019-20, steadily increasing the number to 3-5 electives per term, open to all BGBDA students. BGBDA students will have the opportunity to take four more electives in their upper years, in addition to the electives taken in first year. This will allow students to pursue academic interests outside of their required courses and/or pursue a minor in a different field.

10. In new tenure track hires, try to recruit faculty with formal training in Design.

Response

The reviewers strongly suggested strengthening our faculty expertise in Design. This would require the addition of a minimum of one new tenure-track position to the existing faculty complement. This position has been approved by the Provost and will be in place in July 2020.

11. Do an inventory on what services would be important for Stratford campus and do those right. For example, does Stratford need some kind of food bank for its students?

Response

The reviewers recommended conducting a complete inventory of needed services for the Stratford School. This process has been launched and will be finalized by mid-2020 with recommendations for student services and an implementation plan.

12. Find some way to provide an introduction of the students to the library. Reinstate library services as part of the orientation program for both undergraduates and masters students. Increase classroom invitations to librarians; explore some librarian office hours on site.

Response

The School will continue to work with Dana Porter Library to provide opportunities for our students to visit the library facilities. There are no plans to have an onsite librarian at the Stratford School. However, library visits and tours are encouraged during Orientation for incoming students.

13. Increase on-site hours for student counselors.

Response

The School is currently in conversation with Counselling Services to increase the presence of counselling from one to two counsellors at the Stratford School.

14. We encourage the School to arrange new spaces for classes, accommodation, and student life. For example, we suggest that the University could support the creation of local student clubs, and provide them with space. Provide or support student events that might also attract other students from main campus. We recognize and appreciate that the School and University are already planning to rent more space in Stratford for these purposes and working with a private developer to build apartment spaces appropriate for the students and that can compete with quality of rental accommodation available in Waterloo.

Response

In addition to the added space that will be available in fall 2019, the reviewers recommend that the University support the creation of local student clubs, and provide students with the necessary space. It is also important to attract students from main campus to Stratford for events. One of our staff members has taken on the responsibility of creating a more vibrant student community. In addition, the GBDA student society has been given a dedicated space at the Stratford School. Recently, students have created the Creators Collective, which is a student-led initiative, where students curate their own digital artwork on the first floor of the Stratford School. The first exhibit drew 150 attendees from the Stratford School and beyond. The Stratford School administration is in full support of this initiative and staff assist students with the logistics of mounting the annual exhibit. The program plans on building on this successful event, which is the responsibility of the staff person in charge. We will also connect with colleagues on main campus regarding increased student support at the Stratford School.

15. For the MDEI candidates, we suggest establishing some course work and formal networking opportunities in Toronto.

Response

The current program is restricted in impact by its location in Stratford because the target learners for the part-time option of MDEI are professionals, at the mid-career stage, who typically are employed full-time. For this type of learner, it is often difficult to physically travel to the Stratford campus twice a week to attend class. Instead of establishing course work and formal networking opportunities in Toronto, we are in the process of developing a hybrid version of the MDEI program that will provide these students with greater flexibility in their schedule. Indeed, the reviewers suggested to teach courses such as DEI612 “Working in Teams” on campus and moving the other courses online. As part of this hybrid program, students will benefit from two short intensive bootcamps/workshops (Intensives) interspersed with online instruction. The first four weeks of DEI612 have been incorporated into the first Intensive. The ad-hoc committee for MDEI is currently working on completing their plan and roll-out schedule for the MDEI online program.

In addition, instead of the MDEI annual fieldtrip we will use this budget to allow our students to attend a relevant conference, such as TrueNorth in KW or an appropriate conference/event in Toronto.

16. Consider development of a research masters and PhD to enrich the curriculum and extend the reach of the program.

Response

Changing the on-campus MDEI program to a hybrid delivery model will allow more space for a research Master's and PhD program. We will begin the development process of these new programs in December 2019 and expect to have a draft brief by summer 2020.

Implementation Plan

	Recommendations	Proposed Actions	Responsibility for Leading and Resourcing (if applicable) the Actions	Timeline for addressing Recommendations
1.	Transportation for students needs to be improved from Waterloo. Since the cancellation of the Greyhound line there is no public transportation service between Kitchener-Waterloo and Stratford. The proposed addition of a Go-Bus service would make a significant difference.	<ul style="list-style-type: none"> • Increased shuttle service • Create partnership with Metrolinx 	Director, Stratford School Dean of Arts City of Stratford	Complete – shuttle service added on Wednesdays and Sundays. Regular service available on Fridays. Metrolinx pilot project will launch in spring 2020.
2.	As many students will continue to commute from Waterloo, avoid wherever possible the scheduling of evening classes especially in winter term. This is a safety issue as the backroads are treacherous in the snowbelt. Faculty members report that their cars often left the road for the ditch in the winter. Currently, only one faculty member lives in Stratford and the others split their time between the Stratford campus and the departments at Waterloo where they are cross-appointed.	<ul style="list-style-type: none"> • Move courses to the Stratford School • Add privately developed student accommodation 	Director, Stratford School Director, Stratford School	Complete – effective Fall 2019, all students (except for 1 st year students) will be in Stratford full time. Fall 2019
3.	Improve the administrative connection with the Waterloo main campus. Students and faculty seem to have a sense of isolation. In other words, recognize and fully accommodate the satellite nature of the school.	<ul style="list-style-type: none"> • Establish stronger administrative connection with main campus 	Dean of Arts Director, Stratford School	Complete – effective July 1, 2018, the Stratford School of Interaction Design & Business obtained official status as a School.
4.	Establish a Program Advisory Board drawn from industry and government of experts who could	<ul style="list-style-type: none"> • Establish a Program Advisory Board 	Director, Stratford School	First meeting planned for fall 2020

	serve as program advisors, employers, and potential donors. This will help the programs avoid falling behind industry trends.			
5.	Develop program outcomes that are explicitly keyed to individual course learning outcomes and deliverables: a course mapping exercise. The Center for Teaching Excellence can help to organize this. Tie this back to the messaging of the program. We suggest that the School consider specific program outcomes for MDEI and how they differ from the undergraduate program.	<ul style="list-style-type: none"> Articulate program outcomes and learning goals 	Director, Stratford School Centre for Teaching Excellence Curriculum committee	Complete – GBDA Learning Outcomes Complete – MDEI Learning Outcomes
6.	We appreciate that the School conducted a major curricular review two years ago. Allow the current curricular changes of two years ago to play out and be analyzed for a year or two before tackling any further major changes.	<ul style="list-style-type: none"> Conduct review of impact of curriculum changes 	Director, Stratford School Curriculum committee	2022-2023
7.	We suggest that the School strongly consider, if at all possible, extending the summer internship into a full co-op option.	<ul style="list-style-type: none"> Introduce full co-op option for BGBDA 	Director, Stratford School CEE	2021-2022
8.	Continue to expand the business side of the curriculum, especially dealing with finance.	<ul style="list-style-type: none"> Offer introductory course in business financials (GBDA 311) 	Director, Stratford School	2020-2021
9.	Explore opening up more electives to allow students to specialize more than is currently possible in a highly prescribed undergraduate program. We would suggest allowing undergraduates in third year be allowed to take two or three electives within BGBDA. This would allow those interested students to explore business or design in more depth.	<ul style="list-style-type: none"> We will offer one elective in 2019-20, steadily increasing the number to 3-5 electives per term. 	Director, Stratford School Curriculum committee	2019-2020

10.	In new tenure track hires, try to recruit faculty with formal training in Design.	<ul style="list-style-type: none"> • Hire one faculty in Design 	Director, Stratford School Dean of Arts, SACA	July 1, 2020
11.	Do an inventory on what services would be important for Stratford campus and do those right. For example, does Stratford need some kind of food bank for its students?	<ul style="list-style-type: none"> • Conduct inventory of needed services 	Administrative Officer	winter 2020
12.	Find some way to provide an introduction of the students to the library. Reinstate library services as part of the orientation program for both undergraduates and masters students. Increase classroom invitations to librarians; explore some librarian office hours on site.		Administrative Officer	winter 2020
13.	Increase on-site hours for student counselors.	<ul style="list-style-type: none"> • Increase the presence of counseling from 1 to 2 counsellors 	Director, Stratford School Counselling Services	winter 2020
14.	We encourage the School to arrange new spaces for classes, accommodation, and student life. For example, we suggest that the University could support the creation of local student clubs, and provide them with space. Provide or support student events that might also attract other students from main campus. We recognize and appreciate that the School and University are already planning to rent more space in Stratford for these purposes and working with a private developer to build apartment spaces appropriate for the students and that can compete with quality of rental accommodation available in Waterloo.	<ul style="list-style-type: none"> • Hire one staff member to oversee and coordinate the creation of local student clubs, student-run initiatives (on hold) • Reorganization of staff members to allocate more to this role 	Director, Stratford School Administrative Officer Dean of Arts	fall 2020

15.	For the MDEI candidates, we suggest establishing some course work and formal networking opportunities in Toronto.	<ul style="list-style-type: none"> • Develop hybrid online/on campus MDEI • Allocate budget for students to attend relevant conferences (e.g., TrueNorth in KW or other conferences/events in Toronto) 	Director, Stratford School Curriculum committee Administrative Officer	In progress, implementation planned for 2021-22
16.	Consider development of a research masters and PhD to enrich the curriculum and extend the reach of the program.	<ul style="list-style-type: none"> • Changing the on-campus MDEI program to a hybrid delivery model would also allow us to create space for a research Master's and PhD program. 	Director, Stratford School, Curriculum committee	In progress

The Department Chair/Director, in consultation with the Dean of the Faculty shall be responsible for the Implementation Plan.

Date of next program review

2025-26

Date

Signatures of Approval



November 17, 2020

Chair/Director

Date

AFIW Administrative Dean/Head (*For AFIW programs only*)

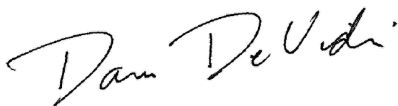
Date



Faculty Dean

Date: 27 November 2020

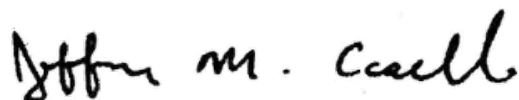
Note: AFIW programs fall under the Faculty of ARTS; however, the Dean does not have fiscal control nor authority over staffing and administration of the program.



February 11, 2020

Associate Vice-President, Academic
(For undergraduate and augmented programs)

Date



February 1, 2020

Associate Vice-President, Graduate Studies and Postdoctoral Affairs

Date

(For graduate and augmented programs)

Appendix A

Bachelor of Global Business and Digital Arts

Program-Level Learning Outcomes

Graduates of the Bachelor of Global Business and Digital Arts (GBDA) will have developed and demonstrated a wide range of knowledge and skills. They will meet the Undergraduate Degree Level Expectations (UDLEs) formulated by the Ontario Council of Academic Vice-Presidents (OCAV) in:

1. Depth and breadth of knowledge
2. Knowledge of methodologies
3. Application of knowledge
4. Communication skills
5. Awareness of limits of knowledge
6. Autonomy and professional capacity

They will also meet the extended expectations of the University of Waterloo:

7. Experiential learning, and
8. Diversity

Our articulation of the learning goals of GBDA has been informed by the VALUE rubrics of the Association of American Colleges and Universities (AAC&U). Each of these rubrics was selected as especially relevant to GBDA and reviewed by a stakeholder in the meeting:

- Creative Thinking
- Critical Thinking
- Ethical Reasoning
- Global Learning
- Inquiry and Analysis
- Integrative Learning
- Intercultural Knowledge and Competence
- Foundations and Skills for Lifelong Learning
- Problem-Solving
- Quantitative Literacy
- Teamwork
- Written Communication

1. Depth and breadth of knowledge

Graduates will demonstrate depth and breadth of knowledge in global business and digital arts, including:

- a developed knowledge and critical understanding of the key concepts, methodologies, current advances, theoretical approaches and assumptions in global business and digital arts;
- a developed understanding of many of the major fields in global business and digital arts, including from an interdisciplinary perspective, and how the fields may intersect with fields in related disciplines;
- a developed ability to: i) gather, review, evaluate and interpret information; and ii) compare the merits of alternate hypotheses or creative options, relevant to one or more of the major fields in global business and digital arts;
- a developed, detailed knowledge of and experience in research in an area of global business and digital arts;
- developed critical thinking and analytical skills inside and outside global business and digital arts;
- the ability to apply learning from one or more areas outside global business and digital arts.

The learning goals around depth and breadth of knowledge specific to GBDA are that students should be able to:

- engage in thorough market and user research in order to synthesize data into usable knowledge;
- develop an understanding of customer and user needs in the marketplace for the purpose of revealing problems that could be solved;
- combine existing approaches to the understanding of what global customers and users value in the marketplace;
- demonstrate empathy in the planning, designing and execution within product/service development with a focus on the interactions of global customers and users in the marketplace;
- seek out and develop expert perspectives on design solutions;
- develop creative propositions and solutions that take into account market research and user needs;
- utilize interdisciplinary perspectives to develop technological solutions for clearly understood global problems;

2. Knowledge of methodologies

Graduates will demonstrate an understanding of methods of inquiry and creative activity in global business and digital arts that enable them to:

- evaluate the appropriateness of different approaches to solving problems using well established ideas and techniques;
- devise and sustain arguments or solve problems using these methods;
- describe and comment on particular aspects of current research or equivalent advanced professional practice.

The learning goals around the knowledge of methodologies specific to GBDA are that students should be able to:

- combine and synthesize existing ideas, images, or expertise in original ways, and work in imaginative ways characterized by a high degree of innovation, divergent thinking, and risk taking:
 - evaluate creative processes and products using domain appropriate criteria
 - solve problems, recognize the consequences of the solution and articulate the reasons for choosing that solution
 - embrace contradictions, integrating alternate, divergent, or contradictory perspectives or ideas fully
 - think innovatively, extending a novel or unique idea, question, format, or product in order to create new knowledge or knowledge that crosses boundaries
 - connect, synthesize, and transform ideas or solutions into entirely new forms
- explore issues, ideas, artifacts, and events before accepting or formulating an opinion or conclusion:
 - state an issue clearly and describe it comprehensively
 - thoroughly, systematically and methodically analyse their own and others' assumptions and carefully evaluate the relevance of context when presenting a position
 - select a specific position, perspective, thesis, or hypothesis that is imaginative and takes into account the complexities and points of view inherent to the issue
 - draw logical conclusions and related outcomes that reflect an informed evaluation and an ability to place evidence and perspectives discussed in priority order
- produce informed conclusions and judgements:
 - identify an object of research that addresses significant yet previously less explored aspects and synthesize gathered research representing various points of view and approaches
 - design an appropriate methodology or theoretical framework
 - organize and synthesize evidence to identify insightful patterns, differences, or similarities related to object of research
 - state a conclusion that is a logical extrapolation from the inquiry findings
- reason and solve quantitative problems from a wide array of authentic contexts and everyday life situations:
 - accurately read and understand information presented in mathematical forms, charts, graphs and geometric figures
 - make appropriate inferences based on information presented in mathematical forms
 - visualize relevant information into various mathematical forms such as equations, graphs, diagrams, tables, or words, in a way that contributes to a further or deeper understanding
 - evaluate assumptions and draw appropriate conclusions based on the quantitative analysis of data, while recognizing the limits of this analysis
 - explicitly describe assumptions and provide a compelling rationale for why each assumption is appropriate
 - communicate quantitative evidence in support of an argument effectively
- design, evaluate, and implement a strategy to answer an open-ended problem or achieve a desired goal:

- identify and construct a clear and insightful problem statement that takes into account evidence of relevant contextual factors
- ideate alone and with others to identify multiple approaches for solving the problem
- propose one or more solutions or hypotheses sensitive to contextual factors and the ethical, logical, and cultural dimensions of the problem
- evaluate potential solutions, deeply and thoroughly considering the history of the problem, reviewing the logic or reasoning, examining the feasibility, and weighing the impact of the solutions
- implement and evaluate a solution in a manner sensitive to the multiple contextual factors of the problem

3. Application of knowledge

Graduates will demonstrate an ability to apply their knowledge of global business and digital arts:

- demonstrate the ability to review, present and critically evaluate qualitative and quantitative information;
- develop lines of argument;
- make sound judgments in accordance with the major theories, concepts and methods of global business and digital arts;
- apply underlying concepts, principles, and techniques of analysis, both within and outside global business and digital arts;
- demonstrate the ability to use a range of established techniques to:
 - initiate and undertake critical evaluation of arguments, assumptions, abstract concepts and information
 - propose solutions
 - frame appropriate questions for the purpose of solving a problem
 - solve a problem or create a new work
- demonstrate the ability to make critical use of scholarly reviews and primary sources.

The learning goals around the application of knowledge specific to GBDA are that students should be able to:

- apply the industry-standard digital tools and platforms to their work;
- synthesize methodologies and approaches learned in the classroom, during the internship or while studying abroad into applied skills for employment;
- ascertain how different cultures and businesses respond to an action;
- determine the viability of appropriate business models for economic transactions;
- develop skills and technical knowledge pertaining to digital storytelling, including storyboarding and narrative development, using industry standard software and equipment through both practice and self-directed learning;
- understand the complexity of the relationship between digital technologies and the communities that employ those technologies and shape the scale and nature of their diffusion through society;
- develop an understanding of “digital culture” and the implications it has on our cultural lives;

4. Communication skills

Graduates will demonstrate the ability to communicate information, arguments, and analyses accurately and reliably, in the many modalities of global business and digital arts, including orally, in writing, and visually to a range of audiences.

- demonstrate a thorough understanding of context, audience, and purpose that is responsive to the assigned task and focuses on all elements of the work;
- use appropriate, relevant, and compelling content to explore ideas within the context of global business and digital arts;
- demonstrate detailed attention to and successful execution of a wide range of conventions particular to a specific project and medium including organization, content, presentation, formatting, and stylistic choices;
- use graceful and accurate language that skillfully communicates meaning to readers with clarity and fluency.

The learning goals around the application of knowledge specific to GBDA are that students should be able to:

- fulfil assignments by choosing a format, language, graphic or other visual representation in ways that enhance meaning, making clear the interdependence of language and meaning, thought, and expression;
- demonstrate mastery of the narrative techniques of storytelling that connect with your audience;
- design visuals to communicate quantitative information clearly and accurately for specialist and generalist audiences;
- express themselves clearly and expressively, formally and informally, in multiple media;
- integrate multiple media of expression for convincing storytelling;
- present project proposals, design research, and project outcomes, orally and with industry-standard presentation tools;
- articulately defend their design decisions to peers, leadership, and clients.

5. Awareness of limits of knowledge

Graduates will demonstrate an understanding of the limits to their own knowledge and ability, and an appreciation of the uncertainty, ambiguity and limits to knowledge and how this might influence analyses and interpretations.

The learning goals around an awareness of limits of knowledge specific to GBDA are that students should be able to:

- recognize the need to make reasonable assumptions in order to move forward;
- articulate the assumptions underlying a calculation, conclusion, design, or recommendation;
- recognize their own biases, cultural or otherwise;
- evaluate assumptions throughout the design process.

6. Autonomy and professional capacity

Graduates will demonstrate autonomy and professional capacity. This includes:

- qualities and transferable skills necessary for further study, employment, community involvement and other activities requiring:
 - the exercise of initiative, personal responsibility and accountability in both personal and group contexts
 - working effectively with others
 - decision-making in complex contexts.
- the ability to manage their own learning in changing circumstances, both within and outside the discipline and to select an appropriate program of further study;
- exercise academic integrity and social responsibility.

The learning goals around autonomy and professional capacity specific to GBDA are that students should be able to:

- learn independently:
 - explore a topic in depth
 - pursue knowledge and experiences outside the classroom
 - review prior learning and past experience, inside and outside the classroom, to establish a foundation for lifelong learning
 - apply prior learning and past experience to new situations.
- collaborate respectfully and effectively on interdisciplinary teams;
- demonstrate a professional work ethic individually and in teams: positive and productive team communication, consistently meeting deadlines, delegate and employ multiple production roles, and establish a pre and post-production workflow;
- reflectively evaluate one's own performance and examine skills that need improvement;
- follow agile processes and frameworks for team work, including contributing to team meetings, equitable collaboration, group organization, workflow management, and communication;
- respond to conflict directly and constructively;
- anticipate and clarify differences in specialist vocabulary between disciplines;
- stay current technically:
 - transfer skills from familiar digital tools and platforms to new versions or variants
 - learn the use of common digital tools and platforms with self-guided tutorials and minimal coaching
 - learn the use of emerging digital tools and platforms with coaching and applied practice.
- behave ethically:
 - recognize ethical issues when they emerge in complex, multilayered global, business, and creative contexts
 - independently apply ethical concepts and consider the full implications of that application.

7. Experiential learning

At the University of Waterloo, we also expect graduates to be able to articulate their learning from experiential or applied opportunities.

The learning goals around experiential learning specific to GBDA are that students should be able to:

- meaningfully synthesize connections among experiences outside the formal classroom (including life experiences and academic experiences such as internships and travel abroad) to deepen understanding of global business and digital arts and to broaden their own points of view;
- evaluate changes in their own learning over time;
- adapt and apply skills, abilities, theories, or methodologies gained in one situation to new situations;
- develop an understanding of complexity through active engagement and study of subjects through real world contexts;
- develop ideas and theories by actively engaging with digital media and design objects;

8. Diversity

At the University of Waterloo, we also expect graduates to demonstrate an understanding of the intellectual, social, cultural, and political diversity of the world in which we live.

The learning goals around diversity specific to GBDA are that students should be able to:

- contribute effectively on diverse teams:
 - collaborate respectfully with diverse others
 - facilitate the contributions of diverse others
 - negotiate a common understanding of the project goals and planning
- demonstrate and apply an understanding of cultural differences to their work
 - demonstrate cultural self-awareness:
 - demonstrate an understanding of the complexity of elements important to members of another culture
 - interpret intercultural experience from the perspectives of their own and more than one worldview
 - demonstrate the ability to act in a supportive manner that recognizes the feelings of another cultural group
 - recognize cultural differences in verbal and nonverbal communication and applies that knowledge to their behaviour and their work
 - ask complex questions about other cultures, seek answers, and apply that knowledge to their behaviour and their work
 - initiate and develop interactions with culturally different others
 - suspend judgement in valuing their interactions with culturally different others.
- seek to understand how their actions affect both local and global communities:
 - evaluate the global impact of their own and others' specific local actions on the natural and human world

- evaluate and apply diverse perspectives to complex subjects within natural and human systems in the face of multiple and even conflicting positions
- adapt and apply a deep understanding of multiple worldviews, experiences, and power structures while initiating meaningful interaction with other cultures to address significant global problems
- take informed and responsible action to address ethical, social, and environmental challenges in global systems and evaluate the local and broader consequences of individual and collective interventions
- examine the historical and contemporary roles, interconnections, and differential effects of human organizations and actions on global systems within the human and natural worlds
- apply knowledge and skills to implement sophisticated, appropriate, and workable solutions to address complex global problems using interdisciplinary perspectives independently or with others.

Appendix B

Master of Digital Experience Innovation Program-level Learning Objectives

Summary

In the Master of Digital Experience Innovation (MDEI) program, we explore new forms of design innovation that emerge through the intersections between business and digital technologies. We use applied management to solve complex challenges through human-centred approaches to design, and interdisciplinary, forward-thinking modes of collaboration. Working with partners outside the university, we use creative leadership to develop innovative solutions for industry.

Guiding Principles

The MDEI program is organized around two organizational pillars: Applied Management and User Experience (UX) Design and User Research.

- **Applied Management** critically examines business management practices and implements innovative strategies to streamline or improve them.
- **UX Design and User Research** focus on understanding the needs of users and developing empathic design solutions to address their needs.

Overall Learning Objectives

1. Develop a *theoretical* and *practical* understanding of innovation in marketing, business strategy, UX design, and digital media.
2. Conceptualize the relationships between innovation, creativity, customer insight, strategy and customer experience that are relevant in contemporary business and institutional practice.
3. Design, prototype, and evaluate innovative, forward-thinking human-centred design solutions to empathically address the needs, desires, and abilities of different audiences.

Learning Objectives - Applied Management

1. Formulate problems: Students will develop a theoretical and practical understanding of evaluating current external business markets, and internal management practices, in order to understand problem spaces and establish where opportunities to innovate exist.
2. Design solutions: Students will use emerging technologies, and original research to generate innovative ideas, for existing companies, in order to create business plans and roadmaps, that enable firms to better meet customer needs and improve shareholder value.
3. Deliver solutions: Students will produce a project plan, and a proof of concept, focused on improving business practices that will deliver a superior customer experience and result in greater performance on key success factors relevant to the competitive landscape of the firm.

Learning Objectives - UX Design and User Research

1. Identify the needs, desires, and abilities of different people using design thinking to create technological solutions that address these.
2. Design and prototype solutions using a variety of physical and digital assets.
3. Design and implement user tests to gather information, validate design decisions, and generate insights.
4. Assess the impact of design using a variety of evaluation methods.

Appendix C

Bachelor of Global Business and Digital Arts (GBDA) Co-op

1. Summary

Current state:

GBDA students are required to complete a one-term internship as a mandatory graduation milestone, taking place in the spring term following the completion of their 3b term. Over the course of 12 to 16 weeks (between May 1st and August 31), students work a 35 to 40-hour week at an approved organization earning an average hourly wage of \$20/hr. Cooperative and Experiential Education (CEE) facilitates the GBDA internship Recruitment Cycle for GBDA students. Students gain limited professional experience in the areas of digital media, including UX/UI, visual/product design, digital marketing, graphic design, social media, project management, product development, etc., as well as business experience in general.

Rationale for proposed change:

- The Honors Bachelor of Global Business and Digital Arts program (GBDA) is an industry-facing program in the sense that students explore the methods, meanings, impacts, and futures of digital and interaction design in heterogeneous global business contexts with the ultimate goal of developing solutions for industry. Although the one-term internship provides a valuable experiential learning experience to GBDA students, it is a very limited experience. With an additional three work terms and an enhanced professional development education through the required WatPD courses, our students will have more opportunities to apply their competencies throughout their program, and not only for one term before their final year of study. This change will increase post-degree employability and personal awareness vis-à-vis the workplace.
- Students consider the mandatory internship between their third and fourth year as one of the highlights of the program because they are able to gain valuable professional experience. With more than one work term, students will be able to experiment with more than one potential career path providing them with a much clearer idea of the future direction they wish to take post-graduation. For example, currently a student may be employed as a web designer or a user experience specialist for their internship. Thanks to the interdisciplinary nature of the program, students also acquire knowledge in areas such as project management, interaction design, marketing and other fields. Given the opportunity of additional work terms, a student might discover a particular professional interest in more than one field, which would impact their career choice in a significant way.
- Additional work terms would also add to fundamental business experience which would be an asset for future employability.

- While we do not have firm data on employer recommendations, we have a strong indication through anecdotal evidence that many of our employers are asking for students every term, not just in the summer.

2. Requirements

- All GBDA requirements as per Calendar
- PD1, Co-op Fundamentals, and PD12, Reflection and Learning (Work term 1)
- Two PD electives (<http://www.ucalendar.uwaterloo.ca/1920/COURSE/course-PD.html>)
- Work term reports/Reflections for Work terms 2,3,4 will be covered by the completion of the PD courses (new as of 2023/24)

3. Work and academic term sequence

After consultation with CEE, we are proposing the following streams:

	F21	W22	S22	F22	W23	S23	F23	W24	S24	F24	W25	S25	F25
	1A	1B	Off	2A	2B	3A	WT	3B	WT	4A	WT	WT	4B

A minimum of three co-op terms are required for graduation. We have scheduled four co-op terms in order to provision for one unsuccessful co-op term. The first work-term is scheduled for the term following the 3A term; this will allow students to have the spring term between year 1 and 2 off and will allow them to study abroad in their 4A term between two work terms.

4. Enrollment

GBDA is technically capped at 180 students, but we currently have an annual intake of 200 students. This proposal is based on an intake of 200 students.

5. Implications for the current curriculum and faculty/staff resources

Courses: Currently, students who fail a required GBDA course, often have to wait two terms (winter, spring or spring, fall) to retake the failed course because all required courses are only offered once per academic year. In order to help students move through the program as seamlessly as possible, we will encourage those who might have failed a course to accept 4-month co-op jobs until they have the opportunity to work for 8-months in work terms 3 and 4. This will reduce the number of students off-

sequence or having to sit out for a term or two. We are currently also in the process of identifying key courses that we will offer in more than one term per academic year in order to reduce the wait time for students who are looking to retake a failed course or who are off sequence for other reasons.

Administrative and advising support: Students will need advising in all three terms, which is and will be handled by the Associate Director, Undergraduate and the Advising Manager. Advisement will include information and support related to co-op requirements and options. As of 2023, all work term reports/reflections will be covered by the students' completion of PD courses. No additional support from the Stratford School will be required. In addition to the Advising Manager, the Stratford School currently has a part-time staff person for administrative support of the internship, who will transition to support co-op.

Employment development: in co-ordination with the CEE, the Stratford School assists in developing and cultivating relationships with prospective employers, which will help students secure suitable employment.

Space requirements: There is currently no on-site teaching in the spring term. With the introduction of co-op, we will be able to utilize the space better by offering courses in the spring term. Conversely, in the fall and winter terms, the Stratford School is at capacity. Moving to a schedule where we teach all three terms and have students on work terms will lighten the burden on the building.

All other resources will remain unchanged.

6. Process

- The Director met with the Associate Dean, Undergraduate, Kathy Acheson; Associate Dean for Co-operative Education and Planning, Bob Park; Associate VP, Academic, David DeVidi to discuss the plan.
- CEE is in the process of conducting a feasibility study that assesses employer availability and CEE resources relevant to the new plan. The feasibility study will be passed on to the Director and Associate Director, Undergraduate. It will be completed by December, 2019.
- The Director and Administrative Officer met with Amanda McKenzie from the Quality Assurance Office. Honours GBDA Co-op is a major modification to an existing plan (Honours GBDA) and therefore is subject only to internal approvals, rather than having to go to the Ministry.
- The Director and Administrative Officer met with IAP for fee assessments for co-op.
- The planned start date for Honours GBDA Co-op is September 2021.

- Please find below the course sequencing for students starting the program in fall 2021 (please note that previous cohorts will not be able to opt-into GBDA Co-op):

Honors GBDA Co-op 2021-2025			
	Fall	Winter	Spring
2021-2022	<ul style="list-style-type: none"> • ARTS 130 Inquiry & Communications • ECON 101 Intro to Microeconomics • Second Language • 2 Electives 	<ul style="list-style-type: none"> • ARTS 140 Information & Analysis • GBDA 101 Intro to Digital Media Design • Second Language • 2 Electives 	<i>Term off</i>
2022-2023	<ul style="list-style-type: none"> • CS 105 Intro to Computer Programming 1 • GBDA 201 Digital Media Project 1 • GBDA 203 Introduction to Digital Culture • GBDA 210 Intro to User Experience Design • GBDA 228 Digital Imaging for Online Applications 	<ul style="list-style-type: none"> • CS 106 Intro to Computer Programming 2 • GBDA 202 Digital Media Project 2 • GBDA 204 Working in Teams & Project Management • GBDA 211 Introduction to Global Business • GBDA 212 Portfolio & Professional Communication 	<ul style="list-style-type: none"> • GBDA 301 Global Digital Project 1 • GBDA 303 Data and Society • GBDA 304 Marketing in the Digital World • GBDA 305 Global Business & Development • GBDA 311 Intro to Business Financials
2023-2024	Work term 1	<ul style="list-style-type: none"> • CS 330 Management Information Systems • GBDA 205 Quantitative Methods • GBDA 302 Global Digital Project 2 • GBDA 306 Ethics and Values in Design • GBDA 310 Advanced User Experience Design & Research 	Work term 2
2024-2025	<ul style="list-style-type: none"> • GBDA 410 Seminar in User Experience Research • GBDA 412 Special Topics in Digital Cultures • GBDA 414 Special Topics in Design & Society • 2 Electives 	Work term 3	Work term 4
2025-2026	<ul style="list-style-type: none"> • GBDA 402 Capstone Course – Cross-Cultural Digital Business (2.OCR) • GBDA 413 Special Topics in Interaction Design 		