

Final Assessment Report

Environment and Business (BES, MEB)

December 2024

Executive Summary

External reviewers found that the Environment and Business (BES, MEB) programs delivered by the School of Environment, Enterprise and Development (SEED) were in good standing.

“This undergraduate co-op program is strong overall based on feedback from students, faculty and administration. It is well-aligned with Waterloo’s vision of interdisciplinarity and applied learning... The flexible online MEB program is a high quality and effective program tremendously valued by students and faculty. Students enjoy their educational interactions while working and the ability to tailor the program while studying either full time or part time.”

A total of four recommendations were provided by the reviewers, regarding strategic funding, interdisciplinary programs, streamlining and renaming program offerings, and eliminating extra courses. 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 for this program is scheduled for 2030-2031.

Enrollment over the past three years

	BES	BES – Co-op	MEB
2024-2025 (CURRENT YR)	46	354	55
2023-2024 (LAST YR)	50	378	52
2022-2023 (THREE YRS)	40	400	65

*Based on Active Student extract from Quest on December 16, 2024.

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 Environment and Business (BES, MEB) programs delivered by the School of Environment, Enterprise and Development (SEED). 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 April 1, 2024. 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 Associate Vice-President, Graduate Studies and Postdoctoral Affairs: Professor Raymond Paquin, John Molson School of Business, Concordia University; and Professor Deborah De Lange, Department of Global Management Studies, Toronto Metropolitan University.

Reviewers appraised the self-study documentation and conducted a site visit to the University on June 10-13, 2024. An internal reviewer from the University of Waterloo, Professor Zoran Miskovic, Department of Applied Mathematics, was selected to accompany the external reviewers. The visit included interviews with the Associate Vice-President, Faculty, Planning and Policy (on behalf of the Vice-President, Academic & Provost); Associate Vice-President, Academic and Associate Vice-President, Graduate Studies and Postdoctoral Affairs; Dean of the Faculty of Environment; Faculty Associate Deans of Undergraduate and Graduate Studies; Director of the School; Director of the grad program, as well as faculty members, staff and current undergraduate and graduate students. The Review Team also had an opportunity to meet with representatives from the library, and Co-operative Education.

Following the site visit, the external reviewers submitted a report on their findings, with recommendations. Subsequently, the program responded to each recommendation and outlined a plan for implementation of the recommendations. Finally, the Dean responded to the external reviewers' recommendations, and endorsed the plans outlined by the program.

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

Program Characteristics

Bachelor's in Environment and Business (BES)

The undergraduate Environment and Business program (BES) has two streams, an honours co-operative and an honours regular (non-co-op) stream. All incoming (first year) students are admitted into the co-op stream, but those who do not want to pursue a co-op degree may opt into the regular stream. Both programs lead to an Honours Bachelor of Environmental Studies – Environment and Business. The co-operative program has an additional degree nomenclature indicating that the program is a co-op program. The only substantive difference in the programs is the absence of co-op work terms in the regular degree.

The Honours BES degree requires 40 courses/20 units: 30 required courses/15 units, plus 10 courses/5 units as free electives. The 30 required courses/15 units include 22 core courses, plus 8 core electives. Free electives let students customize their degree experience through various credentials, which are discussed below.

The BES also has a 3+2 program run in partnership with Nanjing University of Finance and Economics (NUFE). Under this program, students are admitted into the Environment and Business program at NUFE. During the first two years of study, in addition to a full complement of courses offered through NUFE, students complete two University of Waterloo courses, delivered by UW Faculty. After two years, subject to meeting the admission requirements (grades and language) for the University of Waterloo program, students take their final two years at Waterloo. Successful completion of the program leads to students obtaining degrees from both universities. This is not a separate degree program, however students in the 3+2 program must meet the requirements for the co-op or regular program.

In addition to the basic core structure of the Environment and Business program, students may customize their degree experience by choosing to complete various minors, certificates, diplomas and options – with the primary difference among them being the number of courses required to obtain them.

Within Honours Plans in the Faculty of Environment, students may concentrate study in an associated field to the extent that it becomes a Minor (typically 4.0 to 5.0 units where 0.5 unit represents a typical course). A Minor can be taken in most disciplines on campus, and those more frequently undertaken by ENBUS students often include economics, entrepreneurship, human resource management, and geography and environmental management.

Master's in Environment and Business (MEB)

The Master in Environment and Business (MEB) is a professional master's program focused on early and mid-career sustainability professionals. The program is mainly delivered online and was originally designed to be part-time, as it was oriented towards working professionals. In 2014, the program offered a full-time option. This program consists entirely of coursework (10 courses), with a final capstone project course (ENBUS 690A/690B). This program began accepting students in 2010.

Summary of Strengths, Challenges and Weaknesses based on Self-Study

Strengths

BES:

- Co-op continues to be a differentiator for our program.
- Market growth in business sustainability as focus of business has increased over the last seven years.
- Students graduate as proficient “knowledge brokers” (i.e., able to navigate and communicate within and between disciplines).
- The program realizes a net gain of ~30 students from first year to fourth-year.

MEB:

- Flexibility in the program’s delivery to support full-time professionals
- Offer both 1-year (full time) and 3-year (part-time) pathways
- Networking opportunity amongst students with diversified professional profiles

Challenges

BES:

- More external competition in the space with the introduction of comparator programs
- More internal competition at the University of Waterloo with the expansion of business related programs at the undergraduate level.
- ~~Students seem to be struggling more than they used to: Increase in issues related to mental health~~

MEB:

- Perhaps desire has shifted away from a general MEB-style introduction to sustainability concepts, strategies, and tools towards a more focused program (e.g., sustainable financial management)

The School of Environment, Enterprise and Development (SEED):

- Given the number of programs that SEED runs in relation to our relatively small and young faculty complement, program administration is a challenge.

Weaknesses

BES:

- Content coverage is perceived to be “a mile wide and an inch deep”
- Limited pathways for specialization, with no discipline-specific specialization currently offered
- Limited space in the current plan for electives
- Data analytics recognized as a gap in knowledge and skills
- Program name and degree name limiting students’ access to jobs to which they are qualified for

MEB:

- Dated content and limited resources to make relevant and timely changes
- Tuition cost of program compared to competitors.
- Name of the program does not accurately reflect the content covered
- Limited Faculty of Environment support for required recruitment activities

Summary of Key Findings from the External Reviewers

BES strengths include positive student feedback, professional sustainable business education, internationalization, positive program outcomes, a capstone project that introduces students to employers, and pathways to entrepreneurship. Weaknesses are falling enrolment, need for name revision to align with employer norms, and underfunding.

MEB strengths include flexibility, online modality, course options that tailor to student experience, interactive in-person meetings at the beginning and end of program, friendly networking opportunities, and MBA-like perks (conferences, gatherings, professional development, etc.) Weaknesses are small program size, underfunding, lack of recruitment/marketing, and need for name revision to align with employer norms.

Program Response to External Reviewers’ Recommendations

- 1. Strategic Funding:** Urgently address finances on a collegial basis across all university levels, through stakeholder engagement and transparency, to fund programs as per the suggestions in the reviewers’ report. Create a consensus-based funding strategy. Identify all potential funding sources and corresponding specific financial goals. Translate this strategic funding plan into a multi-level university project plan with actionable items, assigned resources, and timelines. Track progress to reach goals and correct/adapt as necessary.

Program Response

As stated, this recommendation is beyond the power of the program's leadership to respond to, as it is directed primarily at senior administrators at the University and Faculty level, and involves broad funding strategies and structures. Nevertheless, the program hopes to undertake some activities that address the underlying concerns raised by the reviewers. The concerns identified in the report relate more to the MEB program, which charges a higher (per course) tuition and carries with it some expectation that the students will receive high levels of support. The key areas where resources are required identified in the report are as follows:

- I) Program marketing and recruitment
- II) Student financial support
- III) In-person programming/networking
- IV) Online course support

As the report recognizes that additional financial support is more likely to result from increased enrollment and improved program revenue, item 1) above is seen as a key priority for the School. In past years, the GPSA has devoted some attention to marketing online professional programs. Marketing online programs to international applicants is a critical deficiency.

Other funding items are generally determined through the Faculty budgeting process in consultation with the School's leadership team and are subject to the broader constraints facing the Faculty and University. In this regard, the School notes that the budgeting process is transparent and consultative.

Proposed Action: Continue to work with the Dean's Office in consultation with the GPSA to identify appropriate budget allocations for the MEB's activities in line with program revenues.

Dean's Response

This recommendation is beyond the scope of what can be implemented at the program level.

- 2. Interdisciplinary Programs:** Make the cross-university interdisciplinary programs development a secondary priority to the funding one above. Waterloo has many programs and now is the time to reassess what you have and fund what you decide to keep/streamline. After the University has the funds to support the programs it decides to focus on, then, with future additional funds, more programs can be invested into for further advancement.

Program Response

This recommendation is directed towards activities beyond the School level such as the coordination of programming at the Faculty and University-levels. The School is supportive of the need for cross-university program coordination and recognizes ongoing efforts at the Faculty-level to support greater coordination. We note that the University used to have a more formal coordination process across “X and business” programs, which may warrant further consideration at the University-level. UW has a unique approach to undergraduate business education embedding business education within a broader interdisciplinary education. This approach aligns with the University’s emphasis on interdisciplinarity but is not sufficiently leveraged or marketed at the undergraduate level.

One area directly related to Recommendation 3 is a broader discussion of degree nomenclature and positioning within some of the key business-oriented programs within the University, particularly at the graduate-level such as the MBET program.

Proposed Action: Meet with GPSA leadership, MBET program leadership and other business-related programs to explore program coordination opportunities

Dean’s Response

The reviewers were not provided with insights into programs other than the ones covered by this review. This recommendation is not actionable for the program.

- 3. Streamlining and Renaming Programs:** Streamline and rename existing program offerings in both BES and MEB programs (and in any other areas where there has been a proliferation of courses) to make the streamlined programs the choices for students, not courses. Developing more focus by streamlining and naming programs accordingly offers many benefits including clarifying program value propositions.

Program Response

This is the School’s priority recommendation. Within their report, the reviewers identify several disadvantages of the program identification and degree nomenclature for existing students and recruitment. Principally, the degree, particularly the undergraduate – Bachelor of Environment Studies – does not accurately reflect the program’s content or the graduates’ skills and knowledge. The reviewers note that this places our graduates at a competitive disadvantage. Potential employers and professional recruiters may favour applicants with traditional business degrees, such as a Bachelor of Commerce (B.Comm) or Bachelor of Business Administration (B.B.A.) or M.B.A at the graduate level. More representative program/degree identification was identified as part of a strategy to improve recruitment and the marketability of the programs. The reviewers indicated that the degree nomenclature may be subject to geographic or other restrictions. A secondary aspect of the program’s identity is its focus on the environmental pillar of sustainability. The reviewers note a greater

emphasis on the social dimensions of sustainability. This observation goes beyond the program identity, but the program names, with their exclusive focus on the environmental pillar, do not reflect the current direction of the field.

Proposed Action: Explore the feasibility and desirability of the program's identity and degree nomenclature that more accurately reflects the business and broader sustainability content of the E.B. and M.E.B. programs.

Picking up on broadening the program's substance to encompass more social dimensions, the School is exploring the development of additional programming and potentially a specialization or minor focused on social sustainability. This initiative is catalyzed by the changes to the School's other undergraduate program in International Development (addressed in a different academic review process). As part of ongoing discussion regarding the future direction of our offering in international development, the School recognizes that there are many elements of that program addressing social justice, human rights, economic inclusion, and developing related issues such as food security and access to sustainable livelihoods that are of increasing relevance to the business-sustainability nexus. The reviewers note that this is an area that the School could build upon.

Proposed Action: Explore the potential options for new course offerings addressing the justice and social dimensions of sustainability, with the possibility of developing a distinct program element, (minor or specialization) in this area.

Dean's Response

I support the program's response here, subject to the proviso that a BComm or MBA may not be feasible and likely represents more than a major modification to the existing degrees.

- 4. Streamline Courses:** Eliminate extra courses that do not fit within the streams. A suggestion is to avoid adding more courses or programs that require increased investments unless they increase the numbers of students in programs for revenue generation and economies of scale e.g., expanding internationalization by online offerings. Focus on increasing return on investments, more focused, streamlined programs (re: Point 3. above) need to take in more students.

Program Response

The School does agree with the need for rationalization and streamlining. To that end, the School continually assesses course registration numbers to ensure that it does not offer non-core courses that have limited student appeal. The School also takes a proactive approach to curriculum shifts by identifying areas of increasing salience to employers and addressing

major societal issues. For example, despite current constraints, the School has identified sustainable finance as an area of potential expansion, building on the success of the Bachelor of Sustainability and Financial Management program (jointly delivered with the School of Accounting and Finance).

Proposed Action: none required

Dean's Response

I'm not sure how this is a recommendation. In any case, yes, the School is actively streamlining its offerings.

Recommendations Not Selected for Implementation

Recommendation 4

Implementation Plan

	Recommendations	Proposed Actions	Responsibility for Leading and Resourcing (if applicable) the Actions	Timeline for addressing Recommendations
1.	Strategic Funding: Create a consensus-based funding strategy to address finances.	Continue to work with the Dean's Office and GPSA to identify appropriate budget allocations for the MEB's activities in line with program revenues.	School's Director and Associate Director, Graduate Studies	Sept. 2026
2.	Interdisciplinary Programs: Make the cross-university interdisciplinary programs development a secondary priority to the funding one above	Meet with GPSA leadership and MBET program leadership to explore program coordination opportunities, positioning of UW business programs at graduate level and degree nomenclature.	Associate Director, Graduate Studies	Sept. 2026
3.	Streamlining and Renaming Programs: Streamline and rename existing program offerings in both BES and MEB programs	i) Explore feasibility and desirability of program identify and degree nomenclature that more accurately reflects the business and broader sustainability content of the BES and MEB programs. ii) Explore the potential options for new course offerings addressing the justice and social dimensions of sustainability, with the possibility of developing a distinct program element, (minor or specialization) in this area.	Associate Director, Undergraduate Studies and the Associated Director, Graduate Studies	Sept. 2026
4.	Streamline Courses: Eliminate extra courses that do not fit within the streams.	No required action	N/A	N/A

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

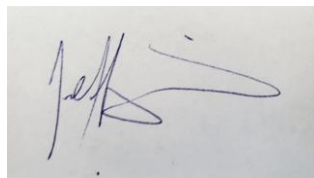
Date of next program review _____

Date

Signatures of Approval



Please keep this document in Word version. We do require you to sign it or demonstrate your approval. If you have issues with signing a Word document, please confirm your approval by adding the following wording when you send back the document by email "I hereby approve the attached document." We will collect formal signatures at a later stage on a pdf version.



March 10, 2025

Chair/Director

Date

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

Date



14-March-2025

Faculty Dean

Date

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.



Feb.14, 2025

Associate Vice-President, Graduate Studies and Postdoctoral Affairs
(For graduate and augmented programs)

Date

On Behalf of the Associate Vice-President, Academic