

**SENATE UNDERGRAD COUNCIL**

TUESDAY 17 OCTOBER 2023

12:30 P.M. EST

NH 3318 / Zoom

[Governing Documents and Resources](#)

TIMING	AGENDA ITEM	PAGE	ACTION
	<b>OPEN SESSION</b>		
12:30 p.m. (5 mins)	1. <a href="#">Conflict of Interest</a>	3	Declaration
	2. Minutes of <a href="#">19 September 2023 Meeting</a>	4	Decision (SUC)
	3. Business Arising from the Minutes	Oral	Input
12:35 p.m. (50 mins)	4. Academic Program Reviews		
	a. Final Assessment Report: <a href="#">Mechanical Engineering, Mechatronics Engineering, and Mechatronics</a> (Michael Collins)	6	Decision (SUC)
	b. Final Assessment Report: <a href="#">Music, Intensive Music Specialization, and Church Music and Worship</a> (Mark Vuorinen)	35	Decision (SUC)
	c. Final Assessment Report: <a href="#">German, Russian and East European Studies, and Cultural Identities</a> (James Skidmore)	50	Decision (SUC)
	d. Progress Report: <a href="#">Human Resources Management</a> (Heather Henderson)	67	Decision (SUC)
	e. Progress Report: <a href="#">Earth Sciences</a> (Mario Coniglio)	76	Decision (SUC)
1:25 p.m. (5 mins)	5. Registrar's Office		
	a. <a href="#">New Undergraduate Scholarships, Awards, And Bursaries</a> (Brenda Denomme)	88	Information
	b. <a href="#">Academic Calendar Dates 2024/25</a> (Jennifer Coghlin)	100	Decision (SEN-C)
1:30 p.m. (30 mins)	6. Teaching Incubator Projects progress update (Kyle Scholz)	Oral	Information
	7. Other Business	Oral	Input
	8. Adjournment	Oral	Input

"Decision (SUC)" to be approved on behalf of Senate

"Decision (SEN-C)" to be recommended to Senate for approval (consent agenda)

"Decision (SEN-R)" to be recommended to Senate for approval (regular agenda)

10 October 2023

 Tim Weber-Kraljevski  
 Governance Officer  
 Secretary to SUC

**Important Dates**

<b>23 October 2023</b>	Senate Meeting
<b>21 November 2023</b>	SUC Meetings
<b>27 November 2023</b>	Senate Meeting
<b>29 January 2024</b>	Senate Meeting
<b>5 February 2024</b>	SUC Meetings
<b>4 March 2024</b>	Senate Meeting

# Excerpt from Senate Bylaw 1

## 8. Declarations of conflict of interest

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8.01	At the beginning of each meeting of Senate or any of Senate’s committees or councils, the chair will call for members to declare any conflicts of interest with regard to any agenda item. For agenda items to be discussed in closed session, the chair will call for declarations of conflict of interest at the beginning of the closed portion of the meeting. Members may nonetheless declare conflicts at any time during a meeting.
8.02	A member shall be considered to have an actual, perceived or potential conflict of interest, when the opportunity exists for the member to use confidential information gained as a member of Senate, or any of Senate’s committees or councils, for the personal profit or advantage of any person, or use the authority, knowledge or influence of the Senate, or a committee or council thereof, to further her/his personal, familial or corporate interests or the interests of an employee of the university with whom the member has a marital, familial or sexual relationship.
8.03	Members who declare conflicts of interest shall not enter into debate nor vote upon the specified item upon which they have declared a conflict of interest. The chair will determine whether it is appropriate for said member to remove themselves from the meeting for the duration of debate on the specified item(s).
8.04	Where Senate or a committee or council of Senate is of the opinion that a conflict of interest exists that has not been declared, the body may declare by a resolution carried by two-thirds of its members present at the meeting that a conflict of interest exists and a member thus found to be in conflict shall not enter into debate on the specified item upon which they have declared a conflict of interest. The chair will determine whether it is appropriate for said member to remove themselves from the meeting for the duration of debate on the specified item(s).

**University of Waterloo**  
**SENATE UNDERGRADUATE COUNCIL**  
**Minutes of the 19 September 2023 Meeting**  
**[in agenda order]**

**Present:** Katherine Acheson, Janice Aurini, Logan Baston, Victoria Chu, Cecilia Cotton, Vivian Dayeh, Laura Deakin, David DeVidi (chair), Leeann Ferries, Jason Grove, Fatma Gzara, Alysia Kolentsis, Carol Ann MacGregor, Grace Marshall, Kristiina Montero, Cathy Newell Kelly, Rory Norris, Isaac Ocampo, Ryan Trelford, Chris Vigna, Johanna Wandel, Tim Weber-Kraljevski (secretary), Richard Wikkerink

**Regrets:** Charvi Patel, Theodore Thompson, Mike Wood

**Resources/Guests:** Angela Christelis, Blair Clarence, Jennifer Coghlin, Trevor Holmes, Carrie MacKinnon, Christine McWebb

**Organization of Meeting:** David DeVidi took the chair, and Tim Weber-Kraljevski acted as secretary. The secretary advised that a quorum was present. The agenda was approved without formal motion.

The chair welcomed new members Logan Baston, Celia Cotton, Laura Deakin, Alysia Kolentsis, and Grace Marshall. The chair also welcomed and introduced guests Christine McWebb and Trevor Holmes.

**1. DECLARATIONS OF CONFLICTS OF INTEREST**

No conflicts of interest were declared.

**2. APPROVAL OF THE 20 JUNE 2023 MINUTES AND BUSINESS ARISING**

The following revision was requested: the addition of the Diploma in Creative Writing, Three-Year General English Creative and Professional Writing, and Three-Year General English Rhetoric, Media, and Professional Communication to the list of minor academic plan changes presented under item 3. The minutes were approved with the revision without formal motion. There was no business arising from the minutes.

**3. ACADEMIC QUALITY ASSURANCE**

Christelis presented on the new Quality Assurance Framework (QAF) from the Quality Council (QC) and the procedural changes for program reviews impacting self-study deadlines, site visits, progress reports, and minors and smaller offerings. Christelis also presented on future goals for Institutional Quality Assurance Process (IQAP) including: website updates; new templates; alignment of accreditation with program reviews; Indigenization and Equity, Diversity, and Inclusion (EDI) guidance in self-studies; program differentiators; and more surveying support for programs. Members discussed: timelines for program review changes and IQAP future goals; the consultation done around changes for program reviews; tailoring self-study templates to programs; and recent improvements to the information provided by IAP, Co-op, and the Library for self-studies. Christelis and DeVidi invited members to provide any further feedback to them directly.

**4. UNDERGRADUATE DEGREE LEVEL EXPECTATIONS (UDLE) 8. DIVERSITY**

McWebb introduced her portfolio and mandate as Associate Vice-President, Faculty Planning and Policy, which includes review of UDLE 8. McWebb provided a brief overview of UDLE 8 and requested feedback on what programs currently teach to satisfy UDLE 8 and how Waterloo could be more intentional about teaching students a better understanding of the intellectual, social, cultural, and political diversity of the world. Members discussed: the current number of programs that are satisfying UDLE 8 and if Waterloo needs to be more strict in ensuring that programs satisfy it; pressure for programs to undergo curriculum diets and potential flexible options that programs could use; the Anti-Racism modules that have been

developed; concerns with one-size-fits-all solutions and the importance of providing students different options; challenges within Arts with having specific program requirements instead of degree requirements; the definition of diversity used in UDLE 8; and the importance of building culture and graduating good citizens who are able to engage others with civility. McWebb invited members to provide any further feedback to her directly.

## **5. OTHER BUSINESS**

The chair invited members to think about topics for future meetings and members suggested religious accommodations. Members were encouraged to send any further topic ideas to the chair and secretary.

The chair provided an update that the Council's recommendation to form a curricular subcommittee is anticipated to go forward to Senate Executive Council at its next meeting; and the recommendation to form an IQAP Committee of Senate is with Senate Graduate & Research Council to review.

## **6. NEXT MEETING**

The next meeting is Tuesday, 17 October 2023, 12:30 to 2:30 p.m. in NH 3318

5 October 2023

Tim Weber-Kraljevski  
Governance Officer

# Final Assessment Report

## Mechanical Engineering (BASc), Mechatronics Engineering (BASc), and Mechatronics (Option)

### September 2022

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#### Executive Summary

External reviewers found that the Mechanical Engineering (BASc), Mechatronics Engineering (BASc), and Mechatronics (Option) programs delivered by the Department of Mechanical and Mechatronics Engineering were in good standing.

*The overall assessment is that the programs are of very high quality...The program is thorough, and the course topics are appropriate, a mix of modern practical skills and traditional fundamental theory...The Co-op program is very successful, with very high placement rates.*

A total of seven recommendations were provided by the reviewers, regarding TA assessments, curriculum review, and commitment to continuous improvement. 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 2027-2028.

#### Enrollment over the past three years

	Mechanical Engineering Honours Co-op	Mechatronics Engineering Honours Co-op	Mechatronics Option
2021-2022	1033	1101	33
2020-2021	1058	1084	22
2019-2020	1057	1047	14

Based on Active Student Extract in Quest, accessed September 15, 2022.

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#### 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 Mechanical Engineering (BASc), Mechatronics Engineering (BASc), and Mechatronics (Option) delivered by the Department of Mechanical and Mechatronics

Engineering. A self-study (Volume I, II, III) was submitted to the Associate Vice-President, Academic on February 12, 2021. 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, Academics: Dr. Bruce Minaker, Associate Professor of Mechanical, Automotive and Material Engineering, University of Windsor, and Dr. Mina Hoorfar, Dean of Engineering and Computer Science, University of Victoria.

Reviewers appraised the self-study documentation and conducted a virtual site visit to the University from February 8, 2022 – March 4, 2022. An internal reviewer from the University of Waterloo, Dr. Christine Purdon, Professor of Psychology, was selected to accompany the external reviewers. The visit included interviews with the Associate Vice-President, Graduate Studies and Postdoctoral Affairs (on behalf of the Associate Vice-President Academic); Dean of the Faculty of Engineering; Faculty Associate Dean of Undergraduate Studies; Chair/Director of the Department, as well as faculty members, staff and current undergraduate 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**

[Mechanical Engineering \(BASc\)](#) is one of the oldest disciplines of engineering. It continues to rapidly evolve and expand, to embrace new areas that include artificial intelligence, autonomous vehicles, robotics, micro electromechanical systems (MEMS), nanotechnology, and human-machine interface. Mechanical engineers design the systems that heat and cool buildings; the vehicles in which we travel; the power plants that generate electricity; and the processes used to manufacture virtually every product.

[Mechatronics Engineering \(BASc\)](#) is an interdisciplinary field that integrates the design principles and practices of Mechanical, Electrical, Computer, and Systems Design Engineering, and thus provides a comprehensive base from which graduates can work and communicate collaboratively

within and across disciplines. The evolution of electronics, materials, artificial intelligence, and computing has influenced industry in many ways that span from computer-controlled machines, to intelligent and autonomous systems, to smart sensors and wearables, among other applications.

The [Mechatronics Option](#) is one of the most popular options available to mechanical engineering students, reflecting the increasing prevalence of integrated mechanical, electrical, and computer systems in the [Industry 4.0 workplace](#) of advanced manufacturing, the (industrial) Internet of Things (IoT), smart cities, etc. This Option is primarily intended for students in Computer, Electrical, Mechanical, and Systems Design Engineering. For Mechanical Engineering students, in addition to the core mechanical engineering curriculum, students must take four additional core courses and one elective course with various offerings of the necessary five courses by the MME Department, Electrical and Computer Engineering Department, and Systems Design Engineering Department.

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

#### **Strengths**

- **Program Size:** The University of Waterloo (UW) has the largest Mechanical and Mechatronics Engineering (MME) program across Canada in terms of enrolled students and is taught by the largest number of full-time faculty. The size and technical diversity of the faculty is reflected in the wide variety of technical electives, options, and specializations available to the students. While all faculty are invested in undergraduate education, the Department has seven full-time continuing lecturers who are dedicated to delivering the undergraduate curriculum. These lecturers work with four technical staff, organized into a dedicated ‘teaching technical staff’ group. These personnel facilitate hands-on, self-directed learning through the MME Clinic, help deliver the engineering design component of the curriculum (e.g., assist student teams with their capstone design projects), and develop laboratories and other educational material.
- **Diversity and gender equity:** As Canada’s largest Mechanical Engineering program, they play a key role in increasing the diversity and inclusivity of their profession. Of the 61 teaching faculty in the MME Department, 11 are women. While this is still low, the program is pleased with their progress to date since this ratio is among the highest gender ratios for any mechanical engineering program in the country. The diversity of their faculty has been achieved through proactive recruitment at the Departmental level, and hiring practices designed to promote equity and diversity in the workplace. Similar activities in undergraduate recruitment have been successful: the number of women in their undergraduate class has steadily increased from approximately 10% in 2009 to 20%



in recent years. Efforts on this front, on LGBTQ+ outreach (Making Spaces, etc.), and on outreach to other groups including BIPOC populations are ongoing. There is still a long way to go to achieve equitable faculty, staff, and student populations. One of the many challenges to this work is included below.

- Hands-on and project-based learning: Coursework is balanced with hands-on and open-ended learning activities at all stages of the undergraduate program. These activities are supported by the MME Clinic, staffed by members of the teaching technical staff, who inspire student self-driven learning through authentic hands-on, practical engineering activities that promote integration between topics, courses and programs.
- Co-operative education: The University of Waterloo's mandatory co-operative program is a key strength of the program's undergraduate training, and is related to the Experiential Learning and Awareness of Limitations UDLEs. During their five/six mandatory work-terms (more than any other school in Canada, and required of all students compared to optional co-op in most other schools), students learn to function and communicate in a professional workplace and to solve real-world engineering problems. Co-operative education also makes employers active participants in the undergraduate pedagogical process. Not only do the employers directly train students during their co-op placements, but they also provide feedback to the Department about strength and weaknesses in the preparation of the students, information that is incorporated into the program's continual improvement process. Ultimately, many of the employers hire co-op students into full-time, permanent positions.
- Entrepreneurship: The undergraduate program places a particularly strong emphasis on entrepreneurship. Waterloo's entrepreneurship ecosystem is fueled by its unique creator-owned intellectual property policy ([Policy 73](#)), meaning that any ideas developed by the students (e.g., through the eight-month capstone design projects) belong exclusively to the students. Many of these projects have matured into engineering patents that have been purchased and commercialized by other companies or have instigated their own spin-off companies. The program's curriculum equips entrepreneurially-minded students with the knowledge base and skillset they need to commercialize their ideas. At the Department level, the eight-month capstone design experience includes modules on intellectual property and the patenting process, and a special award category recognizes projects with high commercial potential. At the university level, the [Velocity](#) start-up incubator is designed to give students the resources they need to commercialize their ideas, which include mentors, equipment, space, and a network. The Waterloo Entrepreneurship Residence Connection is another key part of this landscape, which include live-in Entrepreneurs-in-residence who provide one-on-one

mentoring, and a number of other activities that help students develop into successful entrepreneurs.

### **Challenges**

- Diversity and gender equity: There is a well documented '[leaky pipeline](#)' of women potentially interested in Engineering, in that many more young women take Grade 10 academic science than take the required Grade 12 pre-requisites for admission to Engineering. This pipeline continues to leak in terms of those young women who choose to apply, accept, and continue their degrees. There is also a time lag of many years between an increase in student enrollment in UG programs and a progression to the PhD and potential faculty level. Neither MME nor Waterloo Engineering, nor UW can increase interest in mechanical and mechatronics engineering among high school girls by themselves. Nor can the program single-handedly increase the pool of qualified female PhDs. Similar challenges exist for increasing representation from other groups such as BIPOC populations. The program is happy to support IBET, WiE, and similar initiatives, and will continue this work, but it is challenging, and likely requires work at the Provincial and Federal level, and in industry, in changing the messaging and culture in high schools and industry.
- Student laboratories: Some of the laboratory facilities are out-of-date and require renewal. Limited resources for the purchase, maintenance, and storage of lab equipment make this a challenging problem to solve.
- Academic integrity: New communication technologies and the proliferation of internet-banked assignments and lab reports present new challenges to academic integrity that must be overcome.
- Student wellness/resiliency: The Mechanical and Mechatronics Engineering undergraduate programs are a challenging experience for undergraduate students, and often involves long working hours under intense pressure. While these conditions are formative, and help students develop organizational and time management skills, there is an increasing appreciation that they can also adversely affect mental and emotional wellbeing.

### **Weaknesses**

Several areas of instruction have been identified as relatively weak. These include:

- Investigation (less present in the curriculum, related to the Knowledge of Methodologies UDLE)

- Communication (uniformly identified as an area of concern by faculty, students, and employers)
- Professionalism (less present in the curriculum, related to the Autonomy and Professional Capacity UDLE)
- Impacts (less present in the curriculum, related to the Autonomy and Professional Capacity UDLE)
- Ethics (less present in the curriculum, related to the Autonomy and Professional Capacity and Equity UDLEs)

### **Summary of Key Findings from the External Reviewers**

The overall assessment is that the programs are of very high quality. The admission standards are very competitive and academic credentials of admitted students are very strong. The program is thorough, and the course topics are appropriate, a mix of modern practical skills and traditional fundamental theory. The assessments are rigorous and require evidence of competence. The Co-op program is very successful, with very high placement rates. The instructors are highly qualified. During the visit, external reviewers were impressed with the transparency and frankness of most of their discussions, particularly those with students, which they believe has facilitated an easy consensus on the overall position of the MME programs, its central-- even crucial--role in the University, and a relatively straightforward identification of strengths and weaknesses leading to recommendations on a path forward.

### **Major strengths**

Reviewers identified several areas of strength in the program:

1. The reputation for academics is excellent. Waterloo is consistently identified as a destination of choice for particularly gifted students.
2. The faculty is directly involved in the admission process. This allows the faculty to exert more control in ensuring that the University is enrolling only the most qualified students, and self-determination of the appropriate target enrollment number. Further, it fosters enhanced use of the application data for evaluation of external factors that may influence the students' decision to accept offers of admission, and their likelihood of success (e.g., the distance from home address to the city of Waterloo).
3. The university is constantly moving towards the improvement of the students' experience, e.g., they have an external reviewer to evaluate the cultural dynamics and students' "ownership" of the program. They provide an extensive array of counselling and advising services. At the same time, the changes made to the program to improve the students' experience are implemented with an eye to keeping the reputation for academic rigor intact.

4. The program has a very active and supportive decentralized in-house IT services. They provide an impressive range of support for a variety of issues ranging from research data storage, website delivery, in-classroom AV, and student software tools.

The MME programs are well aligned with the university strategic framework, more specifically around commitment towards:

1. EDI: There is a strong mandate towards EDI; the department is very progressive and has achieved great milestones towards female inclusion in engineering. Also, they have established an anti-racism task force and plans are in place for a cluster hire of Black and Indigenous faculty members. With the support from the Dean, the IBET pathway for PhD students has been launched. There is also an elder in residence helping with the design and implementation of indigenous contents in the curriculum. As part of the EDI mandates, a wellness coordinator has been hired, whose support has significantly improved students' experience and retention in the program. In addition, there is a very strong peer mentorship program which stems from the collegiality ethos being promoted and observed among students.
2. Interdisciplinary studies: this is seen in many areas such as the commitment towards the Canadian Grand Challenges and their reflection in the design courses and the incubator established for entrepreneurship where 4th year students work along with the students from Business.
3. Novel and active curriculum: The first-year program has some innovative features that are very targeted towards engaging the student body in challenge-based learning, with the focus on cognitive development in engineering design. There is an interest in lessons learned from the remote delivery mode (performed during the pandemic), and in blended learning (involving high quality interaction and student centric learning). Another feature of the programs is "The Ideas Clinic" (run by students) facilitating and promoting challenge-based learning in the courses and intersection between the courses. Finally, the five professional development (PD) modules of the co-op programs are exemplary.

### **Areas for improvement and opportunities for enhancements**

The opportunities for enhancement can be considered at the faculty and program levels. At the Faculty level, the areas where concerns were observed include:

1. Direct entry: the lack of the common first year adds additional stress on the students to ensure they have selected the right program from the point of admission, and it adds challenges for those students who want to change programs.
2. Cohort based programs: while the cohort approach has benefits in terms of maintaining academic standards, it limits opportunities for transfer or bridge students (e.g., from colleges).

There was surprisingly little consideration for students who may want to join from another academic institution mid-program. These students can often be very qualified, and their external perspective can add value.

3. A lack of adherence to a CEAB prescribed and clearly defined Continuous Improvement Process: it was notable and troubling that groups in the faculty had been holding regular discussions on Learning Outcomes Assessments for over a decade, and yet no recent modifications of the curriculum that were based on the collection of Learning Outcome Assessments could be identified.

4. Indigenization and reconciliation: a great improvement has been made towards the gender imbalance issue in engineering, but there has been less progress in the area of Indigenization. This challenge is not unique to the University of Waterloo. As engineers, our primary duty of care is to the public good, but the question remains of how to best realize this in an Indigenous context. The program must help to promote the role of engineers and the practice of engineering in Indigenous communities, and the roles of Indigenous people in engineering. The initiatives such as “elder in residence” are welcome changes and demonstrate institutional commitment. Progress towards this goal should be maintained, while carefully ensuring that actions are substantive and not performative. There is risk that some of these actions could be counter-productive if they are not carefully vetted.

### **Program Response to External Reviewers’ Recommendations**

1. One of the suggestions for improvement comes from the discussions with the teaching assistants (TAs). There was a consensus that some type of performance assessment of the TAs on a course-by-course basis, by the faculty members (or perhaps combined faculty and students) would be helpful. It would serve to both incentivize for the TAs to perform well, knowing that a formal evaluation will occur, and to alert them to any shortcomings in their performance where they could focus on improvement for their next assignment. It will simultaneously assist faculty members in their selection of TAs for future courses. There was also some concern that the time allocation of the TAs could be better organized. For example, before the start of semester, the TAs should be provided with a breakdown on how much time they might expect to allocate on specific tasks for the semester (e.g., 15 hours marking assignments, 15 office hours, 15 hours in tutorials, 4 hours preparation, etc.). Ideally this would be accompanied by some sort of timeline indicating in which weeks midterms are likely to occur, when are the major course deliverables to be submitted, so that they might be better able to schedule their workloads throughout the semester.

### **Program Response**

Improving the process of evaluating TA performance has been an ongoing issue within the department. Until recently, TA evaluations were conducted by UG students at the end of every term. Under the direction of a class representative, the class would gather and grade each TA, and then return the grading to the UG Advisors. Unfortunately, class response rates have become lower with each successive term. In the terms leading up to the pandemic, fewer than half of the class cohorts would return the surveys, leaving a majority of TAs without any feedback. At the start of the pandemic, with no classes meeting in person, and with no direct contact between TAs and UG students, the evaluation process stopped entirely. Even pre-pandemic, TAs with little or no direct interaction with UG students were never properly assessed (e.g., exam or project markers, exam proctors). The evaluations of these TAs were either left blank or submitted with average ratings. As a final note, there has never been a process by which faculty supervisors could evaluate their own TAs. It was assumed that instructors would direct their TAs and provide feedback on their performance.

At this time, actions have already been taken to provide better feedback to TAs.

- The evaluation of TA performance by UG classes has been restarted. Class representatives have been briefed on the process, and an information campaign with the UG classes has been initiated to stress the importance of completing the surveys.
- A new TA evaluation process was initiated for instructors. At the end of each term, faculty are now being prompted to enter evaluations and TA feedback into an on-line system. Instructors have been introduced to the process via departmental mailout, and during a recent department meeting. This process has the added benefit of providing feedback to TAs who do not directly interact with UG students.

In recent years, MME has introduced a new on-line TA application process through which graduate students apply to, and compete for, specific TA positions. The purpose of the system was to make the TA selection process more equitable by preventing a first-come first-serve allocation of positions. Unfortunately, introduction of this process removed face-to-face interaction, where instructors presumably would communicate specific TA duties and expectations. Students are currently applying to TA for a specific course, with no foreknowledge of the particular course duties.

To correct this, the following actions have been taken.

- The on-line TA application process is being modified to include TA job descriptions. Graduate students will now be capable of applying specifically to marker or tutorial positions. This will also provide them with insight into the timing of the allotted duties, and the expected workload.
- Course instructors were spoken to during a recent department meeting about TA workload, and on their responsibilities to not only communicate with their TAs about job duties and TA performance, but also to not assign duties that exceed the expected workhours of the position.
- The department maintains an instructor handbook which provides information about everything from university teaching policy, to contact information, to advice on teaching pedagogy. The Teaching Assistant section of this document focusses on the number of TAs assigned, and on the things an instructor should not assign to a TA. It does not currently outline instructor obligations to TAs as their employer. This section of the document will be re-written to provide better guidance to instructors on this topic.
- The graduate office will be working with TAs to provide better feedback on their experiences, and to better inform them of their rights as TAs. This will first be done during the TA training course (ExpectATions) and reinforced in regular communication with all graduate students. By making TAs aware of their rights, and by providing them with a mechanism to report issues, it is expected that the department administration can more quickly intercede and better advocate on a TAs behalf.

### **Dean's Response**

I support the department's approach related to performance assessment of TA's and communication to them about workload and duties as TA's.

2. There was also concern that an upgrade of the laboratories in the ME program is overdue, to ensure that the equipment is modern and well-functioning. This can be integrated as a part of the planned curriculum review.

### **Program Response**

Over the past 20 years, laboratories primarily dedicated to the Mechatronics program have been created and updated. While these labs benefit the automation and control aspects of the ME curriculum, the fluids, thermal, materials and solid mechanics aspects of the program have continued to rely on old and outdated equipment. The Watimake facility is notable exception to the aforementioned investment. The Department has invested heavily in this



facility, and it is used extensively by both the ME and MTE programs. It is not, however, a student laboratory. Watimake should be viewed as a complement to the student machine shop that specializes in advanced rapid prototyping.

The issue of outdated student labs in the ME program is being addressed.

- In 2020, the department invested \$200k to support the creation of a shared use materials laboratory. The investment was largely dedicated to the purchase of new grinding and polishing equipment, and to renovate existing materials processing space. It also included the hire of a materials lab coordinator to oversee lab operation. In the past year, this facility has been expanded by the addition of a microscopy facility. Further expansion plans are underway, including the staff hire of a dedicated materials lab instructor.
- Space has been identified for a new UG thermo-fluids lab facility. The space is currently being prepared for renovation, and two faculty members have been assigned the task of identifying needed lab purchases and room layout. It is expected that the space can be completed by the spring term of 2023.
- Discussions are underway with the Student Design Centre and Student Machine Shop for the creation of new student welding facilities on campus. These facilities will support student teams, as well as the ME Welding Specialization which currently relies on off-campus facilities. New facilities should be in place for the fall term of 2023.
- Improvements to the solid mechanics labs are in the early planning stages.
- The MME Chair has dedicated \$200k per year towards faculty UG lab requests. This includes automatic matching of any funds successfully obtained from the Waterloo Engineering Endowment Fund (WEEF). For example, in the Winter term, Prof. Yue Hu received \$16k in funding from WEEF to replace programmable robots used in a 4<sup>th</sup> year ME/MTE robotics course. The Department added an additional \$16k.

### **Dean's Response**

I support the department's proposed actions to address this recommendation.

3. The curriculum review should also address concerns related to work term preparation. One suggestion is to organize the calendar such that courses with practical job skills or training (e.g., programming languages, CAD and CAE tools, etc.) occur earlier in the program, to boost student attractiveness to potential employers. The curriculum review should include revisiting the list of specializations.



### Program Response

In both the ME and MTE programs, several activities related to work term preparation already existed in the curriculum. For example:

- In ME100 and MTE100 (1A), time is spent specifically on things such as resume preparation, interview skills, professionalism and ethics in the workplace, and technical writing.
- The 1<sup>st</sup> Year Engineering Office dedicates several mandatory training sections, run by the co-op office (1A), that deal with resume and interview skills, job site expectations, and the resources provided by the co-op office.
- In the graphics portion ME100 and MTE100 (1A), students are introduced to common CAD software (chosen through employer surveys), and they are expressly advised to place this skill on their resume.
- Mechatronics students are introduced to programming skills in MTE121 (1A), and again in MTE140 (1B). Mechanical students get programming in ME101 (1B). Students are expressly advised to place these skills on their resume.
- The co-op office regularly offers voluntary workshops on workplace skills that range from resume building and interview skills, to networking and work search strategies. A full list of these workshops can be found at <https://uwaterloo.ca/career-action/workshops-and-events>.
- The Faculty of Engineering has long had the policy of hiring 1<sup>st</sup> and 2<sup>nd</sup> work placement students who were not placed late in the job placement process. In doing so, the faculty provides employment experience.
- The Faculty of Engineering has joined a program called (WE) Accelerate. The program offers 1<sup>st</sup> work term students an opportunity to build work skills on campus in place of a traditional work placement. The program launches in the Fall 2022 term. See <https://uwaterloo.ca/hire/waterloo-experience-accelerate> for more information.

Due to the shift to on-line learning, it is likely that the majority of students interviewed were unaware of the instruction provided. Better efforts will be made to emphasize and enforce these training options.

The curriculum review process had started prior to the pandemic shutdown. Now that UW has returned to in-person learning, the process has restarted, and is actively pursuing the creation of several options. Under consideration are specializations in building sciences / HVAC, aerodynamics, mechatronics, and forensics, as well as general streaming in the areas

of thermo-fluids, materials, and solid mechanics. Their plans were presented to the department in a recent department meeting. They are preparing a department retreat to discuss curriculum issues on April 25, 2023.

### **Dean's Response**

I support the department's proposed actions to address this recommendation.

4. To combat the issue of academic integrity, the faculty should adopt a formal Faculty code of ethics and introduce in-program ceremonies or rituals akin to the Iron Ring ceremony where students are invited to publicly and regularly commit to the prescribed standard of behaviour. Experience has shown that these codes can be extremely effective when properly implemented, but this requires that the practice be fully endorsed by the faculty members.

### **Program Response**

This point is strongly related to the on-line learning environment where Academic Integrity (AI) issues were a frustration to faculty and students alike. Data collected by the Associate Dean UG shows that the number of academic integrity cases brought forward over that period increased significantly. That same data shows the number of cases has dropped significantly since UWs return to in-person learning and assessment. As AI investigations are normally brought against less than 2% of engineering students, this is likely no longer an issue.

- Despite the reduction in AI cases, the Associate Dean UG has indicated that he would raise the issue of a code of ethics during the next Faculty Operations (FOPS) meeting. The discussion will include all Associate Chairs UG and Program Directors in Engineering, as well as senior administration from the 1<sup>st</sup> year engineering office.
- Instructors are to be reminded that they are required to include an AI statement in their course syllabi. The reminder will be in an upcoming Department Meeting, and clarification will be added to the MME teaching guidelines.
- The department made a curriculum change during a recent department meeting aimed at increasing ethics education in the UG program. A proposal was passed unanimously that requires all students to take an ethics-based course, either as one of their CSEs (PHIL315 Ethics and the Engineering Profession), or as part of their WatPD requirements (PD21 Professionalism and Ethics in Engineering Practice).

The University of Waterloo does have an Office of Academic Integrity (OAI), who works with both students and faculty to promote and communicate integrity issues across the campus (<https://uwaterloo.ca/academic-integrity/about-office-academic-integrity>). The OAI offers Academic Integrity training to both UG and Graduate students during orientation and in class through workshops and presentations. They also offer on-line integrity training modules.

- MME will investigate increasing OAI involvement in the ME and MTE programs going forward.

### **Dean's Response**

In addition, I have asked my Associate Dean Teaching and Student Experience to look into the development of an “iron pin” ceremony similar to what UBC, MUN and Guelph have implemented for 1<sup>st</sup> year engineering students as they start their academic journey towards becoming an engineer. This will be used as a way to stress the expected code of conduct for Waterloo Engineering students. I anticipate this will be in place during 2023.

5. The Faculty should recommit to a Continuous Improvement Process as identified by the CEAB, wherein the class achievement of the course Learning Outcomes is assessed, and this assessment metric data is used to inform changes to the curriculum. The process itself should be clearly defined, e.g., reporting processes and delivery schedule of assessments, etc.

### **Program Response**

During preparation of ME/MTE Accreditation visit in 2019, this issue was recognized by the Associate Chair UG. At that time, the Department UG Studies Committee (UGSC) dealt with all aspects of the UG program including: scheduling, UG policy, student grievances, curriculum, etc. A new committee was formed, the Curriculum Review Committee (CRC), which would deal with curriculum improvement. The UGSC would continue, but only deal with issues related to the operation of the UG program.

The CRC was formed in 2019. It currently comprises teaching track faculty and is led by the Graduate Attributes Lecturer (Prof. Andrew Milne). As the Graduate Attributes Lecturer, Prof. Milne is responsible for surveying both faculty and staff on issues related to the undergraduate program, for identifying and monitoring program metrics, and for the keeping of records related to program Learning Outcomes.

The activities of the CRC were slowed significantly by the pandemic. They have now resumed activities and are in the process of collecting information from program stakeholders. To date, the CRC:

- Has met with MMEs newly formed industrial review panel to obtain industry feedback on the existing program.
- Has surveyed and met with most faculty to determine program deficiencies and strengths, along with areas for improvement.
- Has surveyed both current and graduated students for their impressions of the program. The results of these consultations were presented over several department meetings, most recently on 7/27/2022. To complement these efforts, a department curriculum retreat is being planned for April 25, 2023.

#### **Dean's Response**

I support the department's proposed actions to address this recommendation.

6. The Faculty should continue the efforts on addressing gender equity and diversity, and Indigenous issues.

#### **Program Response**

Addressing issues of equity, diversity, and inclusivity is of paramount importance to the Department, Faculty, and University. In 2021, the Dean of Engineering appointed Prof Mary Robinson to be the 1<sup>st</sup> Associate Dean, Outreach, Equity, and Diversity. In that role, and with full support of the Engineering Departments, Prof. Robinson has put forward several EDI initiatives, and facilitated Engineering's participation in several existing initiatives. These include:

- The creation of a new EDI Website
- Participation in the PALs program to promote EDI-R training across the campus
- The creation of the Equity Champion role within the engineering community
- Continued involvement in WiE
- Activities that draw attention to gender-based violence
- Work to improve washroom accessibility on campus, and to provide free menstrual products
- Participation in the IBET PhD Project which provided scholarships and mentoring to black and indigenous students
- Creation of the Elder in Residence and Indigenous spaces within the Engineering Faculty.

The contributions of the Associate Dean, Outreach, Equity, and Diversity are numerous. Appended to this report is a more thorough accounting of activities and initiatives of that office ([Appendix A](#)).

In addition to the role of the Dean's Office, the University continues to work towards a more inclusive environment. Through the Office of Equity, Diversity, Inclusion & Anti-Racism, and the Office of Indigenous Relations numerous initiatives are both actively engaged in the creation of a workplace that is welcoming to all students, faculty, and staff.

### **Dean's Response**

In addition to what the department has outlined we have undertaken, we have also embarked on training for faculty and staff related to what an inclusive workplace looks like for employees and students and this is being implemented over the next year.

7. Explore opportunities for the creation of pathways for transfer students from other institutions, or promotion of opportunities to study abroad. This will require careful attention to the curriculum, or perhaps require an extension of the time in program, but could add valuable outside perspective to the student body.

### **Program Response**

Student transfers from other institutions to MME have always been difficult. Transfer requests go to university admissions where the application package is first assessed. As transfer students are required to meet UW entrance averages (which are high), many applications do make it past this point. The number of transfer requests forwarded to the department each year is on the order of 4 or 5. The department does its best to consider these requests, and does allow 1 or 2 transfers per year. Unfortunately, there is little space in existing cohorts due to low attrition rates, and incoming students cannot usually meet mandatory coop requirements for the program. MME is not in a position to address either of these roadblocks.

With respect to student exchange, the faculty operates an active exchange program in 3A and/or 3B for any student wishing to study abroad.

- The department regularly allows students to pre-clear courses, stream switch within the program, or to take courses while on co-op. On doing so, we accommodate the study term with minimal impacting the student progression.

- The department has appointed exchange coordinators for both the ME and MTE programs. These coordinators review course offerings, provide advice during the planning phase, and monitor students while they are away.
- There are other resources in the Dean's office which connect students to other institutions. (<https://uwaterloo.ca/engineering/undergraduate-students/international-exchange>). These options are presented to students at the start of every term, with instructions on planning for exchange.
- At the university level, there are programs for International Studies Option / Global Experience Certificate, and an option for International Work Terms

As can be seen, there are significant opportunities and support for studying and working abroad. Prior to the pandemic shutdown, between 10 and 15 ME students would be studying abroad at any given time. The uptake in MTE transfers was lower, but only because there are fewer such programs worldwide, and therefore less opportunity for these students to travel. It is likely that this concern came from students who were unable to take part in this program due to COVID travel restrictions, and who are unaware of supports in this area. MME will be sure to reinvigorate interest in the program and bring it back to students' attention in the coming terms.

### **Dean's Response**

As a member of Engineering Deans Canada, I am also actively working with the Canadian Engineering Accreditation Board (CEAB) to find pathways to make international exchanges easier and the number of students who engage in them can be expanded.

### **Recommendations Not Selected for Implementation**

It is noted that while all of the recommendations are helpful, several seem to have their origins in the pandemic shutdown. Travel restrictions prevented exchange programs and resulted in the cancellation of many co-op job opportunities. The switch to on-line learning presented special challenges in maintaining the quality of learning and integrity of the examination process. There is evidence that some of the issues that were identified may be rectifying themselves now that in-person education has resumed. Still, the recommendations serve as a great reminder of the programs, policies and procedures that we once had. They not only emphasize the importance of bringing them back, but also show us that we need to invest in making them more resilient.

These include:

- Recommendation 3 regarding Work Term Preparation. The faculty is actually quite focused on providing new students with relevant work placement experience. Unfortunately, many of these activities were in person, and many of the work placements were on-line. At this time, student training has resumed. The comment, however, is a great reminder of the importance of preparing students to succeed in the workplace.
- Recommendation 4 regarding Academic Integrity. The switch to on-line learning coincided with a significant increase in AI allegations within the Faculty. This was concerning to students and faculty alike. Now that in-person learning has resumed, the number of AI allegations has dropped significantly. Existing safeguards may well be sufficient at this time. Still, efforts to improve the AI within the student body should be continuous.
- Recommendation 7 on student exchanges. The department, faculty, and university invest significant resources toward promoting and facilitating student exchanges. These opportunities were cancelled due to pandemic travel restrictions, and therefore, no student currently in the program has ever had the opportunity to take part in an exchange. At this time, the programs have resumed, and the Department is increasing efforts to re-advertise study abroad opportunities to students.
- Recommendation 7 on student transfers. The Department is open to student transfers. Unfortunately, to qualify for a transfer, applying students must meet UW admission standards and be capable of meeting co-op requirements for graduation. There must also be space in the class that they'll be joining. While transfers are considered (and sometimes successful), they are difficult to facilitate.

**Implementation Plan**

	<b>Recommendations</b>	<b>Proposed Actions</b>	<b>Responsibility for Leading and Resourcing (if applicable) the Actions</b>	<b>Timeline for addressing Recommendations</b>
1.	Some type of performance assessment of the TAs on a course-by-course basis, by the faculty members (or perhaps combined faculty and students) would be helpful	<p>Recommencement of the term-end student evaluation process starting Winter 2022.</p> <p>New on-line TA evaluation process for course instructors. To be tested in Winter 2022 with full implementation by Spring 2022.</p> <p>Modification of on-line TA application process to include TA job descriptions. To be tested in Spring 2022 for Fall 2022 TA positions with full implementation for the Winter 2023 term.</p> <p>Meeting with course instructors to reiterate instructor obligations as a TA employer.</p> <p>Updates to instructor manual, and associated instructor resource material.</p> <p>Improved communication of TA rights to graduate students during TA training. Starting with Fall term TA training.</p>	<p>MME, Undergraduate Office</p> <p>MME, Undergraduate Office and IT support</p> <p>MME, Graduate Office and IT support</p> <p>MME, Department Chair</p> <p>MME, Undergraduate Office</p> <p>MME, Graduate Office</p>	<p>Completed</p> <p>Completed</p> <p>In progress. System is being tested. Full implementation for W2023.</p> <p>Completed. Dept. Meeting on 7/27/22.</p> <p>In progress. To be completed by 12/31/22.</p> <p>Next offering in Fall 2022, and all future offerings.</p>



2.	<p>Upgrade of the laboratories in the ME program is overdue, to ensure that the equipment is modern and well functioning. This can be integrated as a part of the planned curriculum review.</p>	<p>Creation of shared use materials lab. Material preparation and microscopy areas are complete, and a dedicated lab coordinator has been hired. Further expansion will be made to this facility.</p> <p>Hire of new Materials lab instructor. Job posting in preparation for end of Spring term.</p> <p>Creation of new Thermo-Fluids lab facility. Room is being prepared for renovation.</p> <p>Creation of new welding facilities in support of Welding Specialization</p> <p>Renovation of Solids lab facilities.</p> <p>Investment of Department in UG lab facilities. \$200k per year with matching to secured WEEF funding.</p>	<p>MME, Space Committee</p> <p>MME</p> <p>MME, Space Committee</p> <p>MME, Space Committee</p> <p>MME, Space Committee</p> <p>MME, Department Chair</p>	<p>Initial steps completed. Ongoing improvements.</p> <p>Anton Gorny Hired March 1, 2023</p> <p>In progress. Expected completion 8/31/23.</p> <p>In progress. To be completed by 8/31/23.</p> <p>Not yet started.</p> <p>In progress and ongoing.</p>
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3.	<p>The curriculum review should also address concerns related to work term preparation. The curriculum review should include revisiting the list of specializations.</p>	<p>Several initiatives are in place to support success during coop terms. Better effort will be made to remind UG students of the supports that are available to them.</p> <p>The Curriculum Review Committee had stalled during the shutdown and has now resumed their efforts. Plans for curriculum review, including the creation of several new specializations, were presented to the Department. A curriculum retreat is being planned for the Fall term.</p>	<p>MME, 1<sup>st</sup> Year Instructors FOE: 1<sup>st</sup> Year Engineering</p> <p>MME, Curriculum Review Committee</p>	<p>In progress and ongoing.</p> <p>Completed. Dept. Meeting on 7/27/22.</p> <p>Completed. April 25, 2023.</p>
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4.	<p>The faculty should adopt a formal Faculty code of ethics and introduce in-program ceremonies or rituals akin to the Iron Ring ceremony where students are invited to publicly and regularly commit to the prescribed standard of behaviour. This requires that the practice be fully endorsed by the faculty members.</p>	<p>The Associate Dean Undergraduate will be introducing the concept of a code of ethics for students at the next Faculty Operations Meeting (FOPS).</p> <p>Reminder to faculty of mandatory ethics statement in course syllabi.</p> <p>Updates to instructor manual, and associated instructor resource material.</p> <p>An ethics course requirement has been made mandatory in the undergraduate program. Students are now required to take PHIL315 or PD22.</p> <p>The Department will work with the Office of Academic Integrity to offer ethics seminars to both students and faculty, and to better introduce ethical standards to 1<sup>st</sup> year classes.</p>	<p>FOE, Associate Dean Undergraduate</p> <p>MME, Department Chair</p> <p>MME, Undergraduate Office</p> <p>MME, Undergraduate Office</p> <p>MME, Undergraduate Office</p> <p>MME, 1<sup>st</sup> Year Instructors</p>	<p>Iron Pin Ceremony will be first conducted with in Sept 2023.</p> <p>Meeting on 7/27/22.</p> <p>In progress. To be completed by 12/31/22.</p> <p>Completed. Dept. Meeting on 2/23/22.</p> <p>1<sup>st</sup> ethics lectures in preparation for Fall 2022.</p>
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5.	The Faculty should recommit to a Continuous Improvement Process as identified by the CEAB, wherein the class achievement of the course Learning Outcomes is assessed, and this assessment metric data is used to inform changes to the curriculum	<p>A Curriculum Review Committee (CRC) has been formed consisting of teaching track faculty and chaired by the departments' outcome-based assessment coordinator (Prof Andrew Milne).</p> <p>Stakeholder interviews have been conducted with students, faculty, and the Departments' industry review panel. Results were presented to the Department on 7/27/2022.</p> <p>A curriculum retreat is being planned for the Fall term.</p>	<p>MME, Undergraduate Office</p> <p>MME, Curriculum Review Committee</p> <p>MME, Curriculum Review Committee</p>	<p>Completed. Fall 2019</p> <p>Completed. Fall 2021 to Spring 2022</p> <p>Completed, April 25, 2023.</p>
6.	The Faculty should continue the efforts on addressing gender equity and diversity, and Indigenous issues.	Please see attached list of Faculty Level initiatives.	FOE, Associate Dean of Outreach, Equity, and Diversity	Several Ongoing Initiatives
7.	Explore opportunities for the creation of pathways for transfer students from other institutions, or promotion of opportunities to study abroad.	The ability to study and work abroad is heavily supported by MME, the FOE, and the University. Each year, between 15 and 20 students in MME study at other institutions. This process was shut down due to international travel restrictions. It has now restarted.	MME, Undergraduate Office	International study restarted in Winter 2022

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

Date of next program review \_\_\_\_\_ **2027-2028**  
Date


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**Signatures of Approval**

  
\_\_\_\_\_  
Chair/Director

Aug 29, 2023  
Date

\_\_\_\_\_  
AFIW Administrative Dean/Head (*For AFIW programs only*) Date



\_\_\_\_\_  
Faculty Dean

August 30, 2023  
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.



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

July 24, 2023  
Date

**In General:**

<b>What we're doing</b>	<b>Status</b>
<p><b>Engineering EDI (Equity, Diversity &amp; Inclusion) Website</b>  <a href="https://uwaterloo.ca/engineering-equity-diversity/">(https://uwaterloo.ca/engineering-equity-diversity/)</a></p> <ul style="list-style-type: none"> <li>• A hub for EDI events, trainings and information for faculty, staff, and students</li> <li>• Amplifying great activities and events going on around campus and the community in addition to those offered specifically in Engineering.</li> </ul>	<p>Launched: February 2022            Regularly updated with new information</p>
<p><b>EDI-R PALs</b></p> <ul style="list-style-type: none"> <li>• EDI-R = AVP Equity, Diversity, Inclusion &amp; Anti-Racism at the University-level</li> <li>• PAL = Program Area Leads  <a href="https://uwaterloo.ca/human-rights-equity-inclusion/equity-office/program-area-leads-pals#"> (https://uwaterloo.ca/human-rights-equity-inclusion/equity-office/program-area-leads-pals#)</a></li> </ul> <p>Mary Robinson was selected as the PAL for the faculty of Engineering in June 2022.</p>	<p>Launched: June 2022            Monthly meetings &amp; training session as PALs program rolls out across campus</p>
<p><b>EngSoc Inclusivity Commissioner</b></p> <ul style="list-style-type: none"> <li>• Undergraduate student position, selected by the Engineering Society, to liaise with the AD Outreach, Equity and Diversity and EngSoc affiliates (NSBE, AISES, WiE, EngiQueers,) on matters relating to EDI</li> </ul>	<p>Launched: 2020            Regular contact between AD portfolio and undergraduate students, including micro-grants to support initiatives started by students for students such as attending Toronto Pride (June 2022)</p>
<p><b>Equity Champions</b></p> <ul style="list-style-type: none"> <li>• A collection of faculty &amp; staff in the departments and schools across the faculty of Engineering, working collaboratively to address of equity, diversity and inclusion.</li> <li>• Review existing Engineering policies and processes with an equity lens</li> <li>• Recommend/arrange training opportunities as needed in their particular department/school</li> <li>• First area of focus is around reviewing equitable hiring practices across Engineering</li> </ul>	<p>Under development.            Current plan is to open applications in Fall 2022; candidates self-nominate with ok from director/chair</p>

## Appendix A

### Gender Equity & Diversity:

What we're doing	Status
<p><b>Women in Engineering (WiE) committee</b></p> <ul style="list-style-type: none"> <li>• WiE brings together faculty, staff and students to address the needs of women-identifying folks in Engineering</li> <li>• Both the undergraduate and graduate students have their own free-standing committees</li> <li>• Activities for peer-to-peer support, advocacy, outreach, recruitment and education throughout the year</li> <li>• Supported by an outreach coordinator</li> </ul>	<p>Ongoing since 1992. Faculty-wide committee meets nine times/year.</p>
<p><b>Gender-Based Violence Education</b></p> <ul style="list-style-type: none"> <li>• In partnership with SVPRO (Sexual Violence Prevention &amp; Response Office) and community partners</li> </ul> <p><b>16 Days of Activism Against Gender-Based Violence (General Audience)</b></p> <ul style="list-style-type: none"> <li>• a collection of self-directed, remote, and in-person activities to help educate the Engineering community around gender-based violence, the role of male allies, and bystander intervention</li> </ul> <p><b>Undergraduate Students</b></p> <ul style="list-style-type: none"> <li>• Mechanical &amp; Mechatronics Engineering students in 1B academic term – 2-hour session includes viewing of Picture a Scientist with structured discussion around roles as male allies and bystanders</li> <li>• Electrical &amp; Computer Engineering students in 1A &amp; 1B academic terms, approx. 3 hours/term, modules and workshops around understanding gender-based violence and role as male allies and/or bystanders to interrupt this violence.</li> </ul> <p><b>Graduate Students</b></p> <ul style="list-style-type: none"> <li>• Learn-based module under development by Centre for Teaching Excellence for responding to disclosures of sexual violence training for TA</li> </ul> <p><b>Faculty, Staff &amp; Research Group</b></p>	<p>Nov-Dec 2021 (to be repeated annually) (<a href="https://uwaterloo.ca/engineering-outreach/16-days-activism-against-gender-based-violence-engineering">https://uwaterloo.ca/engineering-outreach/16-days-activism-against-gender-based-violence-engineering</a>)</p> <p>Launched July 2021 with ME, expanded to MTE in March 2022 In partnership with SVPRO On-going with regular refinement</p> <p>Launched Sept 2020 1A modules in Fall 2020, 1B modules in Winter 2022, in partnership with SVPRO On-going with regular refinement, lead by ECE Wellness Coordinator</p> <p>Learn module complete. Planning pilot roll-out underway</p>

<ul style="list-style-type: none"> <li>Helping those in positions of power understand their responsibilities and power/privilege, beyond sexual harassment training</li> </ul>	<p>Pilot launching July &amp; into Fall 2022 with couple of groups</p>
<p><b>Washroom Accessibility</b></p> <ul style="list-style-type: none"> <li>Completed an in-person review of all washrooms in Engineering buildings</li> <li>Identify where discrepancies exist (e.g. no women's washroom on a floor) and recommend solutions</li> <li>Includes physical accessibility, access to change tables, and ungendered washrooms</li> </ul>	<p>Survey completed June 2022 Updated list of washrooms published on EDI website, shared with EngSoc and centrally.</p>
<p><b>Menstrual Equity</b></p> <ul style="list-style-type: none"> <li>No menstrual supplies currently provided in washrooms across campus; those that do exist being done <i>ad hoc</i> by folks in those buildings.</li> <li>Plans to stock menstrual products in vending machines have not materialized</li> </ul>	<ul style="list-style-type: none"> <li>June 2022 – posters at washrooms in E5, E6 &amp; E7. Centralized free menstrual product supply pick-ups in E7 and CPH</li> <li>July 2022 – posters being added to washrooms in RCH, DWE, E2, E3 and CPH</li> <li>Identifying more centralized pick-up locations across campus until in-washroom solution developed</li> <li>On-going conversations at university-level around developing a centralized solutions</li> </ul>
<p><b>On-going support of cross-campus initiatives</b></p> <p><b>Truth Values Play + Panel</b></p> <ul style="list-style-type: none"> <li>In partnership with Women in Math (WiM) and Women in CS (WiCS), hosting the one-woman play <i>Truth Values</i> and follow-up panel discussion</li> </ul> <p><b>Engendering Success in STEM (ESS) Consortium</b> (<a href="https://successinstem.ca/">https://successinstem.ca/</a>)</p> <ul style="list-style-type: none"> <li>PRISM research groups in ESQ summer camps around boys &amp; girls' attitudes towards STEM proficiency</li> <li>RISE to interrupt biases in faculty members</li> </ul>	<p>Sept 2022</p> <p>Summer 2019 &amp; 2020</p> <p>Summer 2021 &amp; present</p>



**Indigenous Issues**

<b>What we're doing</b>	<b>Status</b>
<p><b>IBET PhD Project</b> (IBET = Indigenous and Black Engineering and Technology Momentum Fellowship - <a href="https://uwaterloo.ca/engineering/indigenous-and-black-engineering-and-technology-momentum">https://uwaterloo.ca/engineering/indigenous-and-black-engineering-and-technology-momentum</a>)</p> <ul style="list-style-type: none"> <li>• Created at UWaterloo in 2020</li> <li>• \$30,000/year fellowship paid by one of 15 partner institutions + mentorship + community with peers studying in Engineering and Computer Science</li> <li>• Targeted intervention to address chronic under-representation of Black and Indigenous folks in STEM fields by providing culturally-relevant supports.</li> </ul>	<p>Launched January 2021</p> <ul style="list-style-type: none"> <li>• 2021 cohort: 17 fellows (1 Indigenous)</li> <li>• 2022 cohort: 11 fellows (2 Indigenous)</li> </ul>
<p><b>Engineering Elder-in-Residence</b></p> <ul style="list-style-type: none"> <li>• Hiring Bill Woodworth (<i>Rawe:nokwas</i>) who is Mohawk, Bear Clan, of the Haudenosaunee of the Six Nations. (<a href="https://uwaterloo.ca/engineering/about/people/wwoodwor">https://uwaterloo.ca/engineering/about/people/wwoodwor</a>)</li> </ul>	<p>Sept 2021 (1-year), extended for 5-years to 2027.</p>
<p><b>Indigenous Spaces in Engineering</b></p> <ul style="list-style-type: none"> <li>• Elder's Office on both Waterloo (Engineering) and Cambridge (Architecture) campuses where folks can meet with the Elder-in-Residence in a culturally-appropriate space</li> <li>• Elder's Garden – traditional plants growing on the Engineering campus (wild strawberries, tobacco)</li> <li>• Physical land acknowledgements in all Engineering buildings, incorporating traditional signage such as bent trees.</li> </ul>	<p>July 2022: dedicated spaces in both locations, renovations underway</p> <p>June 2022-present</p> <p>Securing funding, identifying artists + locations. Installation to begin 2023.</p>
<p><b>Indigenous Learning Opportunities</b></p> <ul style="list-style-type: none"> <li>• <b>KAIROS Blanket Exercises</b> for faculty (<a href="https://www.kairosblanketexercise.org/">https://www.kairosblanketexercise.org/</a>)</li> <li>• <b>At the Woods' Edge - Tsi Khaharkta</b> (GenE499, Arch 285) – a retelling of the history of settler-Indigenous relations from first contact to today, by Elder Bill</li> <li>• <b>June 21 Indigenous Peoples' Day Celebrations</b> – Haudenosaunee Thanksgiving Address to start the day, Indigenous feast at lunch, teachings by Elder Bill</li> <li>• <b>[Working title – Interacting with Indigenous Elders]</b> – course under development by Leslie Wexler (<a href="https://uwaterloo.ca/centre-for-teaching-excellence/people-profiles/leslie-wexler">https://uwaterloo.ca/centre-for-teaching-excellence/people-profiles/leslie-wexler</a>) to help folks in Engineering understand protocol for working with Elders and Knowledge Keepers</li> </ul>	<p>3 offered Oct 2020 – June 2021</p> <p>May-Aug 2022 (offered again Spring 2023?)</p> <p>June 21 2022</p> <p>Planned for Fall 2022.</p>

<p><b>Outreach Coordinator (Indigenous)</b></p> <ul style="list-style-type: none"><li>• Hire a local, Indigenous person to lead outreach activities to Indigenous communities and support activities in Engineering</li></ul>	<p>To be posted Fall 2022 Job description under review with Office of Indigenous Relations</p>
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# Final Assessment Report

## Music (BA, Minor), Intensive Music Specialization (BA), Church Music and Worship (Minor, Diploma)

### November 2022

#### Executive Summary

External reviewers found that the Bachelor of Music program and Minor, Bachelor of Intensive Music Specialization, and Church Music and Worship Minor and Diploma programs delivered by the Department of Music were, overall, of good quality.

A total of 5 recommendations were provided by the reviewers, regarding collaborations, enrollment, and course development and content. 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 2027-2028.

#### Enrollment over the past three years

	Music General 3YR	Music General 4YR	Music Honours	Music Honours Co-op	Music - Intensive Music Specialization Honours	Music - Intensive Music Specialization Co-op	Music Minor
<b>2021-2022</b>	2	0	15	6	1	1	28
<b>2020-2021</b>	3	1	15	4	1	0	27
<b>2019-2020</b>	0	1	21	4	2	0	22

	Music and Peace Specialization	Music in Global Context Specialization	Music and Peace Specialization	Church Music and Worship Minor	Church Music and Worship Specialization	Church Music and Worship Diploma
<b>2021-2022</b>	0	1	0	0	0	0
<b>2020-2021</b>	0	0	0	0	0	0
<b>2019-2020</b>	0	0	0	1	0	0

Based on Active Student Extract in Quest, accessed November 23, 2022.

#### 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 music programs (BA, Minor, Diploma) delivered by the Department of Music at November 2022

Conrad Grebel University College. A self-study (Volume I, II, III) was submitted to the Associate Vice-President, Academic on May 12, 2021. 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: Professor Susan Lewis, University of Victoria, and Professor Brian E. Power, Brock University.

Reviewers appraised the self-study documentation and conducted a virtual site visit to the University on June 21-24, 2021. An internal reviewer from the University of Waterloo, Professor Olaf Weber, School of Environment, Enterprise and Development was selected to accompany the external reviewers. The visit included interviews with the Associate Vice-President, Academic, Dean of the Faculty of Arts; Arts Undergraduate Associate Dean; President, Conrad Grebel University College, Dean, Conrad Grebel University College, Chair of the Department, as well as faculty members, staff, and current undergraduate students. The Review Team also had an opportunity to view photos of the program facilities and 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 of Arts and the Dean of Conrad Grebel University College 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**

### **Three-year General Music:**

Music requirements in the Three-year General Music program require a minimum major average of 65%. At least six academic course units (12 courses) in Music, including MUSIC 110, MUSIC 270, MUSIC 271, one of MUSIC 232 or MUSIC 233 and two of MUSIC 253, MUSIC 254, MUSIC 255, MUSIC 256. Students must participate in at least four terms of Music Ensemble, which do not count towards the 12-course requirement. By graduation, students must demonstrate competence on one instrument (or voice) equal to Grade Ten standing at the Royal Conservatory of Music of Toronto. Normally this is attained through taking Music studio courses.

**Four-year General Music:**

Music requirements in the Four-year General Music program require a minimum major average of 65%. At least eight academic course units (16 courses) in Music, including MUSIC 110, one of MUSIC 232 or MUSIC 233, three of MUSIC 253, MUSIC 254, MUSIC 255, MUSIC 256 and three of MUSIC 270, MUSIC 271, MUSIC 370 and MUSIC 371. At least four Music courses must be at the 300-level or higher. Students must participate in at least six terms of Music Ensemble, which do not count towards the 16-course requirement. By graduation, students must demonstrate competence on one instrument (or voice) equal to Grade Ten standing at the Royal Conservatory of Music of Toronto. Normally this is attained through taking Music studio courses.

**Honours Music:**

Music requirements in the Four-year General Music program require a minimum major average of 70%. At least eight academic course units (16 courses) in Music, including MUSIC 110, one of MUSIC 232 or MUSIC 233, three of MUSIC 253, MUSIC 254, MUSIC 255, MUSIC 256 and three of MUSIC 270, MUSIC 271, MUSIC 370 and MUSIC 371. At least four Music courses must be at the 300-level or higher. Students must participate in at least six terms of Music Ensemble, which do not count towards the 16-course requirement. By graduation, students must demonstrate competence on one instrument (or voice) equal to Grade Ten standing at the Royal Conservatory of Music of Toronto. Normally this is attained through taking Music studio courses. A Joint Honours academic plan with Music may be taken in combination with most Arts disciplines in which an Honours academic plan is offered and with many Honours majors in other Faculties.

**Honours Music (Arts and Business Co-op and Regular):**

Music requirements in the Honours Music (Arts and Business Co-op and Regular) program require a minimum major average of 70%. At least eight academic course units (16 courses) in Music, including MUSIC 110, one of MUSIC 232 or MUSIC 233, three of MUSIC 253, MUSIC 254, MUSIC 255, MUSIC 256 and three of MUSIC 270, MUSIC 271, MUSIC 370 and MUSIC 371. At least four Music courses must be at the 300- level or higher. Students must participate in at least six terms of Music Ensemble, which do not count towards the 16-course requirement. By graduation, students must demonstrate competence on one instrument (or voice) equal to Grade Ten standing at the Royal Conservatory of Music of Toronto. Normally this is attained through taking Music studio courses.

**Specializations in Music:**

Specializations are open to all students majoring in Music. Music students may elect to complete either the Music in Global Context Specialization or Peace Specialization, but not both.

**Intensive Specialization:**

The Intensive Music Specialization is taken in combination with the Honours Music plan-level requirements listed above. Students interested in pursuing the Intensive Music Specialization will be required to fulfill the following requirements:

- A minimum Music major average of 75%.
- Successful completion of four additional MUSIC courses at the 300-level or above, for a total of ten academic course units (20 courses) in Music.

**Church Music and Worship Specialization:**

The CMW Specialization requires successful completion of 3.0 academic units including, MUSIC 222 and MUSIC 322, MUSIC 363/CMW363/RS 357, and MUSIC 364/CMW 364/RS 358 and two of:

- CMW 201 and CMW 202 (0.25 units each)
- RS 152 or RS 250
- RS 235 or RS 236/JS 236
- RS 240/HIST 235

**Music in Global Context Specialization:**

The Music in Global Context Specialization requires successful completion of six courses (five half-credit courses and two quarter- Cyclical Academic Program Review 10 credit courses), including: MUSIC 232, Music 233, three of MUSIC 231, MUSIC 333, or MUSIC334/GSJ 334, MUSIC 355, MUSIC 392. Students must enroll in two of MUSIC 116, MUSIC 117, MUSIC 216, MUSIC 217, MUSIC 316 or MUSIC 317, specified as World Music Ensemble.

**Music and Peace Specialization:**

The Music and Peace Specialization requires successful completion of five courses, including: MUSIC 355/PACS 335, three of MUSIC 231, MUSIC 232 or MUSIC 233, MUSIC 334/GSJ 334, MUSIC 355, and additional PACS course from the list below but now already taken, and one of PACS 201, PACS 202/LS 271, PACS 203/HIST 232.

A **Music Minor** is open to students enrolled in any degree program and requires successful completion of a minimum of four academic courses units (eight courses) in Music with a minimum cumulative average of 65%, including, MUSIC 110 and MUSIC 270. Six additional courses selected in consultation with the Music Department, and participation in at least two terms of Music Ensemble, which may not be counted as part of the eight-course requirement.

A **Church Music and Worship Minor** is open to students enrolled in any degree program and requires successful completion of a minimum of four academic units (eight courses) with a minimum cumulative average of 65%, including:

- CMW 363/MUSIC 363/RS 357
- CMW 364/MUSIC 364/RS 358

- one of MUSIC 253, MUSIC 254, MUSIC 262
- one of RS 130/JS 131, RS 235, RS 236/JS 236
- one of HIST 235/RS 240, HIST 348/RS 344, HIST 379/RS 343, RS 348
- one of RS 151, RS 152, RS 250, RS 257, RS 286
- two of the following (not already selected above): CMW 201 and CMW 202 (two terms of Worship Practicum), MUSIC 222, MUSIC 232, MUSIC 233, MUSIC 376, MUSIC 253, MUSIC 254, MUSIC 262

**Diploma in Church Music and Worship:**

Students enrolled in any non- or post-degree academic plan may pursue the Diploma in Church Music and Worship. The Diploma in Church Music and Worship requires successful completion of 2.5 academic course units (five courses) with a minimum cumulative average of 65%, including:

- CMW 363/MUSIC 363/RS 357
- CMW 364/MUSIC 364/RS 358
- RS 240/HIST 235
- one of MUSIC 253, MUSIC 254
- one of RS 235, RS 236/JS 236

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

- High-quality full-time faculty with national and international profiles in scholarship, music performance and composition and strong teaching evaluations.
- Excellent long-serving adjunct faculty teaching academic courses, studio music lessons and leading department ensembles. The Department maintains good relationships with adjunct instructors, as evidenced by high retention rates and the extent to which adjunct faculty engage in the program beyond their teaching responsibilities.

**Program:**

- Within a relatively small department, we offer wide-ranging performance opportunities through three choirs, a university orchestra, instrumental chamber ensembles, jazz ensemble, and Balinese Gamelan ensemble. Ensemble offerings are available and open to all students on campus and it is not unusual for faculty and staff from across the university to participate.
- Being situated in a liberal-arts context allows the Department of Music to explore, through both research and courses offerings, the intersections of music and other disciplines. Examples of these offerings include regular course offerings that study music and landscape, music and peace, and other topics.

- Experiential course offerings such as the Music and Culture Travel Course (MUSIC 355) and the Church Music and Worship Practicum offer students opportunities to have learning experiences abroad and/or outside of the traditional classroom.
- With the exception of two high enrolment lecture courses (MUSIC 140 and MUSIC 246), class sizes are relatively small.
- The flexibility of the Bachelor of Arts standardized plans allows for students to pursue Joint Honours and Double Majors, and/or a co-op stream.
- The Music Department offers one of the few undergraduate experiences in studying and actively participating in a Church Music and Worship curriculum. As other music programs have distanced themselves from studies in church music or closed programs entirely, the department continues to invest in the program which resonates with the mission of Conrad Grebel University College.
- The Department of Music provides essential service teaching at the University of Waterloo and attracts a wide range of students who contribute to the department through diverse engagement in courses and ensembles.

**Students:**

- Students are drawn from all faculties within the university. The Department benefits from the wide-ranging interests, abilities and experiences of students, particularly as they are interested in and able to bring perspectives from their primary discipline of study to their study of music.
- Graduates of the program find success in graduate education, teacher's college and wide-ranging employment, both in the field of music (eg. Librarian of Kitchener-Waterloo Symphony, Artistic Director, KW Glee) and outside (employment in the high-tech sector). Recent alumni have been admitted to competitive graduate programs at McGill University, University of Toronto and the University of British Columbia, and in some cases direct-entry into PhD programs.

**Community:**

- The Department of Music maintains strong relationships in the wider community, particularly with community-based musical organizations.
- There is a strong sense of community amongst students and faculty. There are regular, intentional settings for faculty to engage with students in informal ways, such as eating lunch in the dining room, weekly community suppers, and an annual pizza party with students.

**Challenges**

- Many of the programs with which we compete for students, including Wilfrid Laurier University, are direct-entry programs. Unlike many other programs within the Faculty of Arts, it is assumed that students who will major in music at University of Waterloo have a reasonably high-level of prior experience in the discipline. Identifying these students



before they arrive at UW, therefore, is critical to the success of recruitment to the program.

- Recruiting students to the University is further challenged when the Department is not able to contact potential students directly. The Department of Music remains obscured in the faculty structure and a centralized recruitment program, making it more difficult for potential students to find us.
- Having a standardized plan with other programs in the Faculty of Arts lowered the number of required courses. The Standing Committee of Institutional Members of the Canadian University Music Society guidelines for Undergraduate Programs suggests that “in programs leading to a four-year degree Bachelor of Arts (or other) with a major or equivalent in Music, approximately one half of the courses should be in music.” The Standardized Plan makes it more difficult to compete with the more focused curricula of other music programs.
- The Department of Music depends on a relatively large number of part-time faculty for studio instruction and a number of high enrolment courses. In order to retain the best instructors, it will be important to continue to keep on par with rates of pay for instructors at other nearby institutions.
- The Co-op stream of the University of Waterloo interrupts the flow of what are normally full-year musical experiences in other university settings (i.e., full-year music ensembles, Music Studio sequencing).
- Students from a faculty other than Arts who declare Music as a second major, do not count towards the Department of Music’s majors.
- Music ensembles provide an avenue to help students balance the demands of university life, improving and/or maintaining student mental health and well-being; however, students outside of the Faculty of Arts are not always permitted by their faculty advisors to enroll.

### **Weaknesses**

- Although the Department of Music enjoys improved facilities, since the building project in 2014 created new practice facilities, ensemble rehearsal and classroom space, the Department still lacks a dedicated, high profile, on-campus performance space, and is often still short on space for rehearsals and other events.
- The Department of Music must increase its exposure and visibility on campus and have a higher community profile.
- The Department of Music views the interdisciplinary specializations (in Music and Peace, Music in Global Contexts, and Church Music and Worship) and the Intensive Specialization as under-subscribed.
- Several high enrolment courses are offered by and dependent on part-time sessional faculty.
- With a small cohort of full-time regular faculty there is an impact to course offerings and sequencing, and the number of courses taught by full-time faculty. Sabbatical cycles,

administrative releases, and shared administrative responsibility without teaching release (auditions, juries, recruitment, noon-hour concert coordinating, library liaison, CMW director, Living-Learning coordinator, Gamelan managing director), all have to be managed carefully along with faculty course loads.

- Graduates do not often enough find the jobs they want.
- There are too few co-op work placements directly related to music available.
- The program does not offer courses in music education, sometimes seen as important for graduates as they apply for and enter a teacher's college

### **Summary of Key Findings from the External Reviewers**

Reviewers indicated that “the unit has been realistic in its SWOT analysis. It has a good sense of its strengths as a small, close-knit student-oriented musical community, where students feel like a cohort with real support and individualized attention from its instructors. It is also realistic in its assessment of challenges that are both beyond and within its control.”

### **Program Response to External Reviewers’ Recommendations**

1. Pursue collaborations (math, applied health science, popular culture, for instance) to increase majors, enhance program offerings, and build infrastructure.

#### **Program Response**

Current initiatives of the music program include recruiting students from all parts of the university into its ensembles, in particular, and courses more generally. The recently signed MOU with the Faculty of Math for a Music and Math Live Learn Community is an example of a formal collaboration with another unit of the University. The Music Department will continue to pursue relationships, where appropriate and possible, with units on campus to develop and enhance programs. One particularly exciting opportunity would be to collaborate on a state of the art, acoustically-superior shared facility that could become a flagship building on the growing campus. This concept, though enormous in scope, aligns well with the needs of the program, and with the current strategic plan of the University to build a supportive environment for living, learning, working and discovery.

#### **Dean’s Response**

I strongly support collaboration and interdisciplinarity, particularly across the diverse units on campus. Participation in the Music programs is available to students in all faculties at Waterloo and contributes to the vitality of our campus. Needless to say, creating a new facility is an ambitious endeavour, but the Faculty of Arts will be happy to be involved in these discussions, and would also welcome participation from the broader University community, given that new performance space would be beneficial to the campus as a whole.

**Dean's Response (AFIW)**

I strongly support interdisciplinary collaboration with other University of Waterloo Faculties and departments, and I know the department looks for ways to connect and collaborate with other programs. A new performance facility would be a significant boost to both the program's profile and the presence of the performing arts on campus. An initiative on that scale is unlikely in the near future, yet administrators at Conrad Grebel have entered in conversations with their counterparts on the main campus of the university to begin the conversation.

2. Target recruitment efforts to build cohort in the first year, including increasing recruitment activities, outreach activities in high schools, and guarantees of admission to the music program.

**Program Response**

The music department will work with the Faculty of Arts to increase targeted recruitment activities to the music program with an emphasis on identifying a strong first-year cohort of students, critically important to a music program. Doing so will help to level the playing field with other music programs who recruit students directly into first-year entry programs, the sector norm. We recognize that targeted recruitment efforts and communications strategies would need to be coordinated with the Faculty of Arts Undergraduate Office, and the department will develop a recruitment strategy in consultation with the Faculty of Arts to work together to target recruitment, in coordination with Conrad Grebel University College's Communications office.

**Dean's Response**

As with most Arts programs, students are not recruited directly into the major. I agree that the program should continue to work with the Arts recruitment team to identify opportunities to attract prospective majors while also supporting the overall Arts recruitment strategy. The program might also consider adding recruitment resources, which has been successful in increasing applicants to some other AFIW programs.

**Dean's Response (AFIW)**

I support the department's initiative in working with Arts' recruitment team in reaching potential students. If I can assist in making connections with Arts' counterparts and supporting Music recruitment efforts, I will do so.

3. Determine whether the current music content for the BA is sufficient and address the quantity of material in the theory and musicianship courses (which is too high).

**Program Response**

As the external review team noted in section 2.3 of the External Reviewer's Report, the current curriculum for the Bachelor of Arts in music is lower in music content than comparable Bachelor of Arts programs (The Canadian University Music Society Standing Committee of Institutional Members recommends approximately one half of the courses leading to a four-year Bachelor of Arts in Music should be in music). The number of required courses for 4-year majors, however, is limited to 16 by the Faculty of Arts. The Music program will not seek an exception to the Faculty of Arts' program requirements, but rather seek to address the issue of the quantity of material being taught in the Music Theory sequence of courses (which currently includes musicianship) in other ways. The program will explore the feasibility of developing a separate musicianship curriculum offered outside the number of required courses.

**Dean's Response**

This curriculum change is well justified by the reviewers. However, the number of plan-level required courses for a 4-year major in the Faculty of Arts is 16. This decision was made at the Faculty level six or seven years ago, and was intended to increase the flexibility of our programming, including opportunities for work-integrated learning, a key Waterloo differentiator. It is important to note that there is nothing to prevent a student enrolled in any major from taking more than the minimum number of plan-level courses required for that major; most departments employ pro-active advising to identify students who would benefit from taking more than the bare minimum. I encourage the program to consider ways to meet the aim of this recommendation, which is to increase the number of musicianship courses relative to theory courses, within this context.

**Dean's Response (AFIW)**

In conversation with the department and the reviewers' report, the theory courses currently contain too much content in an effort to make sure that student musicianship develops at a pace with theory instruction. The Faculty of Arts' limit of 16 required courses for a 4-year major constrains some solutions. The department's plan to look at comparative institutions may offer alternative models, but there may be other ways to meet the goals of the reviewers' recommendation through advising or streaming.

4. Create a few online courses at the 300-400 level to offer in the summer term, thereby increasing the options for upper-level classes and potentially increasing uptake in the co-op program. This can be a step toward an eventual tri-semester program structure.

**Program Response**

The external reviewers recognized the need to increase upper-level course offerings in spring term, to respond to the needs of students who take advantage of either of the Co-op programs available in Music (Arts Co-op and Arts and Business). The suggestion that this can

be solved by offering a few online courses at the 300-400 level is one that the music department, to date, has not considered. We affirm the need for additional course offerings in the spring term as student numbers in co-op increase, or as students look for more flexible ways to complete the program. It may be determined that the offerings that better meet the priorities of the program will be in-person synchronous courses, rather than online offerings. Regardless of the format, the additional teaching will bring an increased financial obligation which we will need to plan for.

### **Dean's Response**

Whether or not the Music Department decides to offer more Spring term programming is of course a decision that will need to be made by the Department in conjunction with Conrad Grebel. It is true that UW's commitment to Co-op makes the availability of Spring term courses in all our majors desirable, and equally true that this can be a challenge for smaller departments. It might be more efficient to offer a large-enrolment class (e.g., MUSIC 246) in the Spring term, rather than the necessarily very small 300-400 level classes, but again, this is a decision for the Department and Grebel.

### **Dean's Response (AFIW)**

At the current level of majors, not all of whom are in the co-op program, offering 300-400 level courses in the spring term may conflict with concurrent College-wide efforts to make sure that courses meet minimum enrolments. Nevertheless, Grebel will work with the department and the Faculty of Arts to look at student data and demand for Spring term to make sure that students make timely progress through their program. As it becomes clearer that more students expect a trimester progression, Grebel will work with the department to resource Spring term teaching needs, such as the development of an online 300-level course.

5. The case for increased sessional funding to meet these recommendations is strong. Sessional instructors play a critical role in the Department of Music and more funds are needed to secure instructors given the market and pending retirements.

### **Program Response**

Recommendation 5 suggests that the department ensure increased funds are made available to support the department's sessional faculty on which the delivery of the music program depends. Like most post-secondary music departments, the program at University of Waterloo relies on a significant number of specialized instructors to teach Studio music lessons, direct music ensembles, and teach courses. The program regularly reviews its hourly rate for Studio instructors and accompanists and adjusts as necessary to ensure it remains competitive and fair to attract high quality instructors. The external reviewers noted in their report the high quality of the sessional instruction the department retains. Additionally, the program has secured an endowed fund whose earnings will be used to support the Studio instruction program. This will allow for increased instruction for students without increasing

the studio fee students pay. Recommendation 4 makes the case for the development of new courses to increase upper-level offerings in Spring term. The increased teaching in spring term will bring with it new, increased costs to the department, whether or not the courses offered are new online offerings (as suggested by the reviewers), or synchronous in-person courses (perhaps more in line with department priorities), and will need to be budgeted for.

**Dean's Response**

No additional comment.

**Dean's Response (AFIW)**

Grebel has worked with the Department to increase the rate of pay for studio instructors and matches the Faculty of Arts' compensation for sessional instructors. As an acknowledgment of the important role some of the program's sessional instructors play, the College has also offered the possibility of offering more spacious contracts for key sessional instructors in order to minimize the precarious nature of this critical teaching.

**Recommendations Not Selected for Implementation**

Recommendation 4 suggests the creation of several upper-level online offerings to increase courses in spring term. While the department recognizes the growing need for increased offerings in spring they may prefer to pursue additional in-person upper year course offerings, and instead explore CEL-supported versions of current 100- and 200-level high enrolment courses.

**Implementation Plan**

	<b>Recommendations</b>	<b>Proposed Actions</b>	<b>Responsibility for Leading and Resourcing (if applicable) the Actions</b>	<b>Timeline for addressing Recommendations</b>
1.	Pursue collaborations (math, applied health science, popular culture, for instance) to increase majors, enhance program offerings, and build infrastructure.	Continue to pursue conversations with interested units about possible programmatic connections and infrastructural collaborations.	Chair of Music with senior administrators at Conrad Grebel University College (President, Dean, Director of Advancement)	Fall 2022-Spring 2023
2.	Target recruitment efforts to build cohort in the first year, including increasing recruitment activities, outreach activities in high schools, and guarantees of admission to the music program.	Determine, in consultation with the Faculty of Arts, what recruitment activities could be coordinated by the Department of Music and the Communications office at Conrad Grebel University College.  Resume and expand outreach activities in high schools when health regulations/guidelines will allow.  Determine, with the Faculty of Arts, whether the possibility of a direct-entry music program is viable.	Chair of Music, Dean, CGUC and Faculty of Arts leadership	Fall 2022-Spring 2023 (Covid precautions still preclude high school engagement activities the program has typically offered; we will resume these activities when possible).
3.	Determine whether the current music content for the BA is sufficient and address the quantity of material in the theory and	Examine the range of BA Music programs at other Canadian universities.  Develop courses in Musicianship as separate offerings from Music Theory.	Chair of Music with Faculty of Arts Leadership, Grebel Dean	June 2023 to explore feasibility to develop specialized courses in Musicianship

	musicianship courses (which is too high).	Determine, in consultation with the Faculty of Arts, whether an increase in music content in the Honours BA is viable.		
4.	Create a few online courses at the 300-400 level to offer in the summer term, thereby increasing the options for upper-level classes and potentially increasing uptake in the co-op program. This can be a step toward an eventual tri-semester program structure.	Determine demand for upper-level courses in Spring term, and whether to expand current offerings with online offerings.  In conjunction with Recommendation 5, determine teaching needs for increased spring course offerings.	Department of Music, Grebel Dean	Large enrolment course, Music 246, to be added to S23 offerings; Music Theory 271 was added to S22 offering and will be offered again in S23.
5.	The case for increased sessional funding to meet these recommendations is strong. Sessional instructors play a critical role in the Department of Music and more funds are needed to secure instructors given the market and pending retirements.	In light of Recommendation 4, to increase course offerings in Spring term, and to respond to a pending retirement of the instructor of two high enrolment courses, determine and address long-term teaching needs.  Research rate of pay for sessional instructors of Studio lessons and accompanists in other comparable programs.	Chair of Music with administration of Conrad Grebel University College	Implement in time for budget cycle, early 2023


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




Date of next program review \_\_\_\_\_ **2027-2028**  
Date

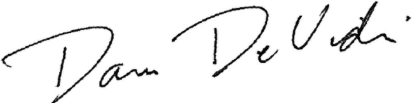
**Signatures of Approval**

  
\_\_\_\_\_  
Chair/Director Date  
Nov 25, 2022

  
\_\_\_\_\_  
AFIW Administrative Dean/Head (For AFIW programs only) Date  
January 10, 2023

  
\_\_\_\_\_  
Faculty Dean Date  
August 31, 2023

**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.

  
\_\_\_\_\_  
Associate Vice-President, Academic Date  
(For undergraduate and augmented programs)  
October 4, 2022

# Final Assessment Report

## German (BA, MA, PhD, Minor), Russian and East European Studies (Minor), Cultural Identities (Minor)

### August 2022

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#### Executive Summary

External reviewers found that the German (BA, MA, PhD, Minor), Russian and East European Studies (Minor), and Cultural Identities (Minor) programs delivered by the Department of Germanic and Slavic Studies were in good standing.

*The University of Waterloo graduate programs in German are well known and highly respected across Canada and internationally... Through and through, we admire the Department's capacity to find recipes for success, when other programs of their size could not.*

A total of four recommendations were provided by the reviewers, regarding the creation of a new major in cultural identities, two tenure retirement replacements, reevaluation of the PhD qualifying exams, and the development within Arts of an overall strategy for language departments. 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 2026-2027.

#### Enrollment over the past three years\*

	General	Honours	German Minor	REES Minor	German Diploma	Dutch Diploma	MA	PhD
2021-22	0	5	7	0	0	0	1	7
2020-21	0	5	7	2	0	0	1	9
2019-20	0	6	9	2	0	0	0	11

\*Based on Active Students Extract in Quest, February 3, 2022.

#### 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 German (BA, MA, PhD, Minor), Russian and East European Studies (Minor), and

Cultural Identities (Minor) programs delivered by the Department of Germanic and Slavic Studies. 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 July 31, 2020. The self-study (Volume I) presented the program descriptions and learning outcomes, an analytical assessment of the programs, including the data collected from student and alumni surveys, 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: Dr. Kim Misfeldt, Department of Fine Arts and Humanities, University of Alberta, and Dr. David Gramling, Department of Central, Eastern, and Northern European Studies, University of British Columbia.

Reviewers appraised the self-study documentation and conducted a site visit to the University between January 18 and January 22, 2021. An internal reviewer from the University of Waterloo, Dr. Robert Gorbet, Knowledge and Integration, 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; Faculty Associate Dean of Graduate Studies; Faculty Associate Dean of Undergraduate Studies, Chair/Director of the Department, 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 most of the recommendations and resulting Departmental plans, but did not commit to filling the two recommended tenure-line positions. Rather, the Dean suggested that "Increased attention to interdisciplinary programming, together with the possibility of restructuring that would enhance and support such programming, may assist in furthering these goals."

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**

#### Undergraduate Programs:

- [Honours German](#) (4-year program): Honours German consists of 16 courses, with eight required courses drawn from GER 201, 202, 211, 212, 250, 303, 304, 307, 308, 309, 331, 334, 350, 407, 431, 490, 495.
  - Honours German (Arts and Business Co-op and Regular): Students may combine the Honours German academic plan with Arts and Business. In addition to the Honours German requirements, students must also complete the Arts and Business requirements.
  - Joint Honours German (double major program): Students may combine the Honours German major with most other Arts majors or with majors in other faculties.
- [Three-Year General German](#): This is comprised of 12 German courses, with required courses: GER 201, 202, 211, 212 and two of GER 303, 304, 307, 308, 309, 331, 334.
- [German Minor](#): The German Minor is comprised of eight German courses, of which six must be German courses taught in German.
- [Diploma in German Language](#): The Diploma (formerly a Certificate) in German is comprised of any four German language courses, with the exclusion of courses taught in English.
- [Diploma in Dutch Language](#): The Diploma (formerly a Certificate) in Dutch is comprised of any four Dutch language courses.
- [Russian and East European Studies \(REES\) Minor: The Minor](#) comprises 8 courses, including RUSS 101 and 102, Croatian, REES courses as well as courses in other departments (e.g., History, and Peace and Conflict Studies). CROAT 101 and 102 have been and will be stable course offerings, considering that funding is coming from an endowed Croatian Fund. With regard to REES courses (Russian and Slavic literature and culture courses taught in English), the program has been able to provide these courses as cross-listed courses that combine and compare German-language and Russian- or other Slavic-language culture in translation: e.g. GER/REES 180 (German and Russian Literary Masterpieces), GER/REES 220 (Once Upon a Fairy Tale), GER/REES 261 (Understanding Conversation), GER/REES 262 (Multilingualism), GER/REES/FINE 364 (German and Russian Film Pioneers), and GER/REES 385 (Culture Behind the Iron Curtain).
- [Diploma in Russian Language](#) (formerly Certificate, discontinued as of Fall 2021)
- [Diploma in Croatian Language](#) (formerly Certificate, discontinued as of Fall 2021)

#### Graduate Programs

- MA in German (1-year program)

	Course-based option	Research Paper option	Thesis option
Term 1	GER 600	GER 600	GER 600
	GER 6xx	GER 6xx	GER 6xx
	GER 6xx	GER 6xx	GER 6xx
Term 2	GER 6xx	GER 6xx	GER 6xx

	GER 6xx	GER 6xx	GER/X 6xx
	GER 6xx	Prospectus	Prospectus
Term 3	GER 6xx	GER/X 6xx	Thesis
	GER/X 6xx	Research Paper	

PhD in German (Fields: Applied Linguistics; Literature and Film Studies)

		Courses/Study/Disseration	Milestones
Year One	Term 1	GER 600 GER 6xx	
	Term 2	GER 6xx GER 6xx	
	Term 3	<ul style="list-style-type: none"> <li>▪ Prep: oral qualifying exam</li> <li>▪ Language study</li> </ul>	
Year Two	Term 4	GER 6xx GER/X 6xx	
	Term 5	<ul style="list-style-type: none"> <li>▪ Prep: written qualifying exam</li> <li>▪ Language study</li> </ul>	Oral qualifying exam
	Term 6	<ul style="list-style-type: none"> <li>▪ Prep: dissertation prospectus</li> </ul>	Written qualifying exam
Year Three	Term 7	<ul style="list-style-type: none"> <li>▪ Writing: dissertation prep</li> <li>▪ Writing: grant proposals</li> </ul>	Prospectus discussion Language exam
	Term 8	<ul style="list-style-type: none"> <li>▪ Writing: individual chapters</li> </ul>	First doctoral colloquium
	Term 9	<ul style="list-style-type: none"> <li>▪ Writing: individual chapters</li> <li>▪ Writing: conference abstracts</li> </ul>	
Year Four	Term 10	<ul style="list-style-type: none"> <li>▪ Prepare first complete draft of dissertation</li> </ul>	Second doctoral colloquium
	Term 11	<ul style="list-style-type: none"> <li>▪ Submission of first draft; revisions</li> <li>▪ Submission of dissertation</li> </ul>	Dissertation submission
	Term 12	<ul style="list-style-type: none"> <li>▪ Revisions as outlined by PhD committee</li> <li>▪ Final submission of disseration</li> </ul>	Dissertation defense

GER 600 = methods course required in all graduate programs

GER = courses offered by GSS

GER/X = courses offered by GSS or other departments (GSS approval required)

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

### Undergraduate programs:

#### Strengths

- Clearly structured and engaging language courses that adhere to the Common European Reference Framework both in-class and online.
- A variety of Germanic and Slavic languages taught by dedicated faculty.

- A broad spectrum of courses both in German and English that combine language and culture-specific topics with multilingualism and transculturality.
- Highly internationalized programs; study abroad opportunities at all levels.
- Flexibility in program design.
- Small classes provide superior learning and social experiences for students.
- Experiential learning components in a variety of course offerings.
- Ample opportunities to interact with faculty and graduate students.
- A high degree of enthusiasm and loyalty to the undergraduate programs by majors and minors.
- These strengths are reflected in the high level of retention exhibited by the program's students throughout the length of their academic careers, and by the consistent enthusiasm of their alumni.

## Challenges

- The program's most significant challenge is the reduced number of students in language courses in general and German or Russian in particular. They are facing strong attrition rates, especially from first- to second-year *language* courses, in part due to the lack of language requirements, and to student perceptions that language courses are both difficult and not useful for their chosen careers. Although there are a larger number of students who are interested in German or Russian literature and culture in translation, these numbers, too, have been shrinking. Loss of enrolments in language courses starting with the second year has led to small classes that are in danger of being cancelled because of the Faculty of Arts minimum class size of 15. This has led to reductions in language classes offered, has provided less choice for German students, and requires these programs to inactivate or change Certificates in Croatian, Dutch, and Russian language. Another contributing and challenging aspect is the transition between upper levels: According to student feedback from surveys and focus groups, some students find the transition from 200- to 300-level courses a challenging and even awkward leap; others, however, very much appreciate the change in focus and intensity. Needing to cancel courses has not gone unnoticed by undergraduate students, who bemoan the lack of upper-year courses and the problems including the limited number of courses into their schedule (see Appendix 3: GSS Focus Groups).
- Loss of enrolments in the target language has prompted the development of English-language offerings; these, however, endanger some key aspects of these undergraduate programs, such as language proficiency, and have required creative solutions for the upper-level language class offerings. One creative solution can be seen in GER 303 (Interactive German Language and Culture), a course developed in conjunction with faculty at the University of Guelph and offered online by the two universities in alternating years, and through a tandem project with students in Germany. Another solution has been to allow advanced German UG students to take GER 431, a course held

concurrently with a graduate course. As the focus group feedback indicated, however, students sometimes find GER 431 challenging, since they find it difficult to conduct research in the German language. GER 331 (Exploring the German Language) and 334 (Exploring German Literature) were specifically designed to train research skills in the German language, but these courses are constantly below the 15-student minimum and can no longer be offered every year. While students still receive research training through courses taught in English, GER 431 (which is not a required course in the German Major) will likely be reserved for excellent Honours students and/or students with advanced German knowledge. A further challenge, made clear by the input of surveys and focus groups, is that students want to have more control to pursue their own interests. Offering students the choice of courses and corresponding flexibility in meeting degree requirements that would give them such control has become increasingly difficult as the program's resources have become more constrained, e.g. with the ability to offer only one GER 300-level course per term. Offering fewer language classes and shifting to classes taught in English has had an effect on teaching possibilities for graduate students and the PAD (teaching interns from Germany through the *Pädagogischer Austauschdienst*/Pedagogical Exchange Service). As the program has noticed that their German introductory courses are being taught increasingly only by graduate students and the PAD, they are currently making a concerted effort to assign at least one regular faculty member to a section of these language courses. This is difficult, however, as regular faculty members are in high demand for large-enrolment courses, developing online courses, and teaching graduate courses. In effect, the Department is rethinking the traditional model of having graduate students get their "start" in beginners' language courses before moving on to upper-year language courses and courses taught in English, including online courses. For upper-year courses, each graduate student is assigned a faculty mentor who has developed or taught the course and who is tasked with sharing the syllabus, reading list and course structure with the graduate student, discussing course goals and outcomes, and being available for consultation. This supervised rotation through different courses, instructional modes, and languages of instruction allows their graduate students to develop a varied portfolio of teaching experiences, which stands them in good stead in the academic job market and beyond. The downside to this model is that sometimes their graduate students must get up to speed on course material unfamiliar to them; moreover, they must take on full course responsibilities while completing their own course of study.

- Both Majors and Minors take advantage of study and work abroad opportunities, though not nearly as many as the program would wish, despite intense efforts to advertise these programs. Moreover, UW's very popular co-op program, which requires students to take several terms away on work placements at regular intervals, also makes it difficult for these students to enroll in study programs, and work abroad does not come as easily as local co-op jobs. Some of the program's exchange offerings have had to be cancelled due to lack of sufficient enrollment (e.g., the Bamberg Summer School in 2019). They

anticipate, however, that as it becomes more difficult to offer upper-level courses regularly, students who do not enroll in exchange or study abroad programs, whether due to co-op participation or for other reasons, will find it increasingly difficult to earn the necessary credits for the degree within the three or four years allotted. The REES Minor has already reached this tipping point and is in practice extremely difficult to earn. Students are aware of these issues and understand the constraints under which the Department is operating, but they are understandably apprehensive about declaring a Major or Minor in German or REES. Nonetheless, feedback from focus groups and surveys indicates that students are still interested in earning these credentials, and a substantial number of students with other Majors still foresee using the language and cultural knowledge programs on offer in their professional careers.

- The Department is faced with social pressures both inside and outside of academia that prioritize disciplines and courses that are seen—rightly or wrongly—as “practical” and leading to rapid, highly-paid employment; the challenge faced by this Department is to make clear that the knowledge and skills that they provide are also practical, “real-world” skills.

### **Weaknesses**

- While the faculty’s experience and maturity in terms of research and teaching are an asset, the corollary is that most of the program’s faculty members are nearing eligibility for retirement; while there are increasing pressures from the provincial government to encourage retirement in the name of faculty renewal, arguments for replacement of any coming retirees will be difficult based on economic factors alone. However, non-replacement would be a loss for the University: it would weaken the research and teaching profile of the Faculty of Arts and reduce the knowledge available to Canadians about the disciplines studied in the department.
- With regard to online teaching, it has become clear that some faculty members are more interested than others in developing and teaching in an online environment. While these inclinations contribute to the overall strength and diversity of the Department in terms of modes of teaching and reaching a wider constituency, they also tend to exacerbate the problems mentioned above. One issue that has emerged is the need for online course authors to revisit their courses on a regular basis, update them or recast them, based on new research, emerging topics or student feedback. Another issue is the need for training instructors and graduate students to run these courses when the primary author is not available. Both these issues add to the workload of the original instructors and usually go uncompensated either financially or through teaching release. Developing and running online courses has thus emerged as a factor in the workload creep of instructors offering these courses.
- While enrollments in some of the languages are fairly high (e.g., first-year Dutch), the program cannot guarantee stability in these offerings, since these courses (Dutch,



Russian) lack a permanent or even long-term contract instructor. This also makes it extremely difficult to increase student recruitment and course enrollments, when, in turn, low enrollments provide weak arguments for hiring instructors. Croatian first-year courses have more stability due to financial means through Croatian endowment funds.

## Graduate programs:

### Strengths

- Dual emphasis on literary/media/cultural studies and on applied linguistics unique in Canada.
- Constant interaction between native German speakers and English speakers.
- Ample opportunities to interact with faculty, including a formal mentorship program and active advising from the Graduate Officer.
- Strong connections and joint programs with the Universities of Mannheim and Bamberg in Germany, with many opportunities for study/research in Germany.
- Rich opportunities to gain teaching experience in the Department as well as professional development opportunities at the Faculty and University level.
- Strong emphasis on research skills training and encouragement to disseminate research.
- Emphasis on transferable skills beyond academia via SkAATr (Skills Awareness and Articulation Training).
- These strengths are reflected in the success of graduates at both the Master's and Doctoral levels in finding jobs both inside and outside of academia.

### Challenges

- The financial climate after the Government of Ontario's 2019 announcement of a 10% cut in tuition fees for undergraduate and graduate students effective fall 2019, a tuition freeze for 2019 and 2020, and an outcome-based funding model for universities, not only have an immediate impact on the university's budget situation, but may also impede the development or maintenance of programs that are not tied directly to the Province's new "performance metrics" (cf. Friesen, Joe. "[New Metrics for Ontario University and College Funding Include Employment and Graduation Rates.](#)" *The Globe and Mail*, April 16, 2019). UW's Faculty of Arts budgeting model, which factors in enrolment activity in assessing the resource needs of departments (resulting in a general caution and hesitation regarding interdisciplinary programming and new program development), coupled with the Government of Ontario's policy of almost exclusively funding Canadian students at the expense of international students, may come to undermine many of the above-listed departmental goals and objectives, especially at the graduate level.
- Although the quality of applicants to the graduate programs remains high, the number of applicants is lower than the department would like. These programs have done well in

terms of attracting domestic graduate students historically, and their strong relationships with other Canadian institutions have helped keep their graduate numbers stable; but the pool of potential applicants will shrink as both undergraduate and graduate programs at these other institutions undergo attrition. They continue nonetheless to recruit actively.

- The program is not in a strong position to attract international students at the MA level, other than German students via their joint ICGS MA with Mannheim. This is partly due to lack of funding at the provincial level. They are essentially in no position to attract international students at the PhD level, for the same reasons; they maintain their focus on their domestic and Mannheim pools for the MA and domestic sources for PhD students.
- Likewise, although their graduates, both at the MA and PhD levels, have historically done very well in terms of finding jobs both inside and outside of academia, the same attrition will make academic positions—especially full-time, tenure-track positions—increasingly scarce. Mindful of this, they continue to emphasize transferable and professional skills.
- Faculty retirements over the next seven years will increasingly stretch their resources, with implications for the flexibility and quality of the programs they are able to offer. Their plans to streamline and rationalize student workloads and course offerings are meant to offset these issues.

### **Weaknesses**

- The relatively low enrolments in the undergraduate program make faculty renewal unlikely, thus endangering the Department’s well-enrolled graduate program in the medium to long term.
- While online courses may serve to increase their undergraduate enrolment, they are generally less well-suited for delivering graduate-level courses; however, as described above, the resource-intensive nature of online undergraduate courses means that creating and maintaining consumes faculty time and energy that is then less available for graduate courses.

### **Summary of Key Findings from the External Reviewers**

The University of Waterloo graduate programs in German are well known and highly respected across Canada and internationally. There is a truly interdisciplinary approach that is unlike any other graduate program in Canada—combining additional language pedagogy and literature and cultural studies together with linguistics and applied linguistics in meaningful ways. The faculty members in the Department are to be commended for having boldly innovated when other peer institutions did not, and doing so at a caliber and intensity that few other departments were able to muster during the 1990s and 2000s. It is to this forerunner status that we attribute the Department’s ability to attract internationally renowned, cutting-edge faculty researchers who are only now approaching retirement age. Through and through, we admire the Department’s capacity to find recipes for success, when other programs of their size could not.

This department is, however, in what might be termed an existential crisis. Most Canadian institutions are witnessing a general suppression / diminishment of interest in instructed language learning in higher education contexts. This may turn out to be an historical anomaly of the current moment, about which we will need to puzzle retrospectively a few decades from now. But, for now, the general trend seems to be that institutions of higher learning in Canada are willfully disestablishing their language-forward departments through structural divestiture, blaming student disinterest rather than fostering multilingual knowledge-making for a globally minded curriculum. Instead, the heritage / immigrant languages that students already bring with them to the University of Waterloo setting are generally viewed as adequate replacements to previous curricular commitments to languages, though often the university does not accredit and evaluate those students' heritage / immigrant language proficiencies, nor draw them into the centre of the educational process. In all these ways, languages are left to fend for themselves, on the periphery of concern—from the provostial level down and out to the deans and associate deans. Precisely in this age of global intercultural knowledge-sharing, the university faces the prospect of giving away, over the coming years, one of its most expert research communities on matters of cultural difference and linguistic diversity

For us as external reviewers, it is therefore impossible to separate the program from the department, nor the program from the overall bearing of the university—on the evidence of its actions, if not on the letter of its strategic planning texts. That practical bearing at the university appears to be characterized by internationalization and globalization—without the benefit of instructed or institutionally supported languages, and often without international early career researchers (i.e. graduate students). We acknowledge that much of this irony has been shaped by provincial funding constraints.

Another concern is the financial decision to not financially support international graduate students, thereby damaging this department's ability to attract and retain students from the Masters program into the PhD program. It seems a bit like false advertising to be called the Department of Germanic and Slavic Studies if there is no institutional commitment to any tenure-track hire in Slavic Studies.

Given these constraints, we do not foresee a path forward for the German major. We believe Cultural Identities should be expanded into a major, with a 12-credit additional language proficiency component. The Graduate Programs in German are strong, indeed exemplary, and removing the German major from the equation will remove the need to group undergraduate students with graduate students in seminars. It will also alleviate the demoralization of having fewer majors than faculty members, so that those faculty members can focus on building a languages-forward major in Cultural Identities.

Indigeneity and fighting racism were highlighted as priorities for the Faculty of Arts, and likely for the University as a whole, and we are confident that the Cultural Identities programs will serve these priorities in creative and meaningful ways. The study of literature and film is essential to the study of culture and cultural identities. The Department needs to be meaningfully involved in the overall DEI endeavours of the university, including Black Studies, given that Black German studies and research by Germanists / Germans / Austrians of Colour offer a profound and often overlooked set of contributions to DEI, which is often conceived of as a domestic Canadian or North American (anglophone) effort alone.

## **Responses to External Reviewers' Recommendations**

1. We recommend that the department continue to advance the creation of the new major in Cultural Identities with cooperation from other departments and perhaps even other faculties, i.e., knowledge integration.

### **Program Response**

The Department in conjunction with the Departments of Classics, French, and Spanish and Latin American Studies submitted a Statement of Interest for a newly-conceptualized major to the Dean of Arts Office in December 2020. While support in principle for the proposal was indicated by both the Dean and the Associate Dean, UG, a rethinking of the proposal and a delay in the program development were advised. Revised timelines and steps for the program development are outlined in the implementation plan below.

### **Dean's Response**

The Faculty welcomes the development of an interdisciplinary major, drawing on cross-faculty expertise. In our response to the preliminary statement of interest, we called for greater diversity in the understanding of cultural identity (from both a social perspective and from a methodological perspective), more deliberate consideration of the functional application of the education and impacts of research, and more firm and creative distinction from cultural studies. Subsequent meetings with the units involved have resulted in a green light for the development to move forward.

2. We propose two tenure line retirement replacements that will focus on large-lecture enrolments and interdisciplinary approaches that bridge the Department with Fine Arts, Anthropology, Engineering, Public Health, and other disciplines.

### **Program Response**

The department supports this recommendation for two tenure line replacements and their interdisciplinary focus. If granted, these two tenure lines would not be additional hires but rather serve as replacements for two faculty colleagues that have either already left the University (Schulze 2017) or are about to retire (Kuzniar, 2021). As such, the recommendation does not address the urgent need for faculty renewal in face of upcoming retirements over the next assessment period. As the majority of retirements will be in the literature/culture field of our programs, it is urgent that a faculty replacement plan be developed in order to

ensure the continued integrity of existing undergraduate and graduate programs, and to provide the expertise necessary to staff new programs (Cultural Identities) and continue the Department's teaching support in other programs (e.g., Visual Culture, APPLS). It should also be pointed out that the current structures at UW which are predicated on faculty members belonging to one "home" department only make hirings that bridge departments and faculties difficult. That said, GSS is dedicated to an interdisciplinary approach to teaching and scholarship as both linguistics and cultural studies transcend narrow disciplinary boundaries.

#### **Dean's Response**

We recognize that the department is at a crucial point in its history, given that enrolments are not making the argument for replacement positions, but that enrolments cannot be secured without faculty to lead courses and program development. Decisions about faculty complement going forward can only be made with a plan in place to grow and sustain enrolments. Increased attention to interdisciplinary programming, together with the possibility of restructuring that would enhance and support such programming, may assist in furthering these goals; see further under Recommendation #4.

3. We recommend that the PhD qualifying exams be evaluated to determine if they are meeting the needs of the students and of the program.

#### **Program Response**

We agree with the recommendation and are currently implementing the changes as outlined in the review document. We are also in communication with other graduate programs in Canada to better align our qualifying examinations with those of other programs.

#### **Dean's Response**

No further comment.

4. We recommend that the University of Waterloo and Dean of Arts work with all the languages departments towards an overarching strategy and common goals, perhaps through a School of International Languages (SILLC) with a communications / outreach staff with expertise in languages.

#### **Program Response**

We agree with this recommendation, as we feel that the importance of language awareness and multilingualism are currently not sufficiently recognized and supported at the University. Language programs are spread across four departments in Arts and three of the Affiliated and Federated Institutions of Waterloo; finding ways of facilitating cooperation and programming among these groups would benefit Waterloo's students. The Faculty of Arts

Strategic Planning committee is considering structural changes to the Faculty, and this suggestion should be part of those discussions. Appropriate structural changes could also address the Department's concern about the impending retirement of our long-time senior administrator for whom no succession plan has been made to date.

**Dean's Response**

Faculty reorganization is being considered as part of the Arts strategic planning process, currently underway. The goal of such reorganization would be to enhance and facilitate interdisciplinarity, to reduce administrative pressures on small programs/departments, and to allow for more flexibility in complement planning whereby we can hire faculty members into positions less constrained by traditional disciplinary boundaries (see the Department's response to Recommendation #2 above).

**Recommendations Not Selected for Implementation**

None.

**Implementation Plan**

	<b>Recommendations</b>	<b>Proposed Actions</b>	<b>Responsibility for Leading and Resourcing (if applicable) the Actions</b>	<b>Timeline for addressing Recommendations</b>
1	We recommend that the department continue to advance the creation of the new major in Cultural Identities with cooperation from other departments and perhaps even other faculties, i.e., knowledge integration.	<p>Consultations with departments around the Faculty of Arts regarding the scope of the program</p> <p>Submission of the revised Statement of Interest &amp; further consultations with stakeholders across the faculty.</p> <p>Development of the <a href="#">Proposal Brief</a>, Volume 1. Submission to the Faculty Undergraduate Committee and the Dean for feedback. Submission to the Quality Assurance Office. (Phase 2 of the New Program Proposal development process)</p> <p>Development of Volumes 2 &amp; 3 of the Proposal Brief.</p> <p><a href="#">Approval Process</a> (Phase 3 of the New Program Proposal development process)</p> <p>Approval by Faculty Council Committees, site visit (selection of external reviewers, organization of site visit).</p>	<p>GSS Chair, Chairs of other founding departments (Classics, French, SLAS)</p> <p>GSS Chair (Approval required from Associate Dean UG Dean of Arts)</p> <p>GSS Chair, GSS UG Chair</p> <p>Dean of Arts, Quality Assurance Office AVPA</p>	<p>Fall 2021</p> <p>Fall/Winter 2022</p> <p>Winter/Spring 2022</p> <p>Fall 2022-Fall 2023</p>

		<p>Review of External Reviewers' Review by the QA Office and AVPA.</p> <p>Preparation of a response to the reviewers' recommendations.</p> <p>Revision of the Proposal Brief (Volume 1) as required.</p> <p>Potential re-approval of Proposal Brief by the Provost, Faculty Council and the QA Office. Approval by Senate Undergraduate Council (SUC) and Senate.</p> <p>Submission of Program Proposal to the Ministry of Colleges and Universities (MCU) for approval.</p>	Quality Assurance Office	Winter 2024
2	We propose two tenure line retirement replacements that will focus on large-lecture enrolments and interdisciplinary approaches that bridge the Department with Fine Arts, Anthropology, Engineering, Public Health, and other disciplines.	<p>Development of tenure line proposals</p> <p>Discussions with Dean of Arts</p>	GSS Chair Dean of Arts	Fall 2021/ Winter 2022
3	We recommend that the PhD qualifying exams be evaluated to determine if they are meeting the	Student feedback update on needs of students.	Associate Chair, Graduate	Fall 2021
			Associate Chair, Graduate	Fall 2021



	needs of the students and of the program.	Discussions with other PhD granting German departments across Canada Implementation of qualifying examinations as outlined in brief.		
4	We recommend that the University of Waterloo and Dean of Arts work with all the languages departments towards an overarching strategy and common goals, perhaps through a School of International Languages, Literatures, Culture with a communications / outreach staff with expertise in languages.	Discussions among stakeholder programs in Arts to develop common goals and an overarching strategy for all language departments.	Dean of Arts  Members of relevant Arts Departments	Fall 2021/Winter 2022

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

Date of next program review 2026-2027  
Date

**Signatures of Approval**



2022.09.22.

Chair/Director

Date

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

Date

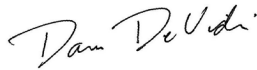


September 7, 2023

Faculty Dean

Date

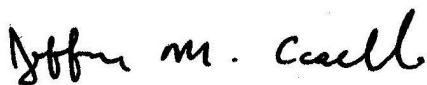
**Note:** AFIW programs fall under the Faculty of ARTS; however, the Dean does not have fiscal control nor authority over staffing and administration of the program.



June 10, 2022

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

Date



August 17, 2022

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

Date

# Two-Year Progress Report

## Human Resources Management (Minor, Diploma)

### June 2022

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#### Background

The self-study review of the Human Resources Management (HRM) Minor program, a program hosted by the Department of Psychology, was submitted October 19, 2018. Following the submission, a site visit was conducted by Dr. Geoff Malleck, Continuing Lecturer, Department of Economics, and Dr. Mark Weber, Professor, Conrad School of Entrepreneurship and Business on March 27, 2019.

Following the site visit, the external reviewers submitted a report on their findings, with recommendations. The program responded to each recommendation and outlined a plan for implementation of the recommendations. The Dean of Arts provided endorsement and commentary on the program response and implementation plan on November 24, 2019.

#### Summary of HRM Programs

The HRM Minor program, administered by the Department of Psychology, is a large and highly successful undergraduate program. Nine courses in the program are approved by the Human Resources Professional Association of Ontario and allows students the opportunity to also gain their Certified Human Resources designation (CHRP). The program offers:

- 1) Human Resources Management (Minor): The HRM Minor is available to University of Waterloo students enrolled in degree studies in the Faculty of Arts, and other Faculties with some restrictions. The HRM Minor requires successful completion of a minimum of eight courses with a cumulative average of at least 70%. The HRM Minor includes courses required by the Human Resources Professionals Association (HRPA) towards the Certified Human Resources Leader (CHRL) /Certified Human Resources Professional (CHRP) designations.
- 2) Human Resources Management (Diploma): The HRM Diploma is designed for individuals who are currently working in Human Resources who wish to expand and update their current skills, or those who desire to gain entry into this exciting field. The HRM Diploma requires successful completion of a minimum of eight courses with a cumulative average of at least 70% and can be completed on a full- or part-time basis. The HRM

Diploma includes courses required by the Human Resources Professionals Association (HRPA) towards the Certified Human Resources Leader or Professional (CHRL/P) designations.

### Enrollment over the past two years

	HRM Minor	HRM Diploma
Fall 2021 to Spring 2022*	322	22
Fall 2020 to Spring 2021	387	30
Fall 2019 to Spring 2020	357	29

\* Student plan modification forms from students declaring the minor come in after the winter term is done and marks for HRM 200 are posted.

### Progress on Implementation Plan

**\*\* NOTE:** Over the past two years, the majority of our program changes focused on pandemic-related shifts in course offerings to remote delivery.

### Recommendations:

#### Recommendation # 1: Staffing

**Staffing. 1. Hire an additional full-time lecturer. In our estimation, this is the single most important recommendation we are making. 2. Multi-term sessional contracts. In order to provide stability and give the Director the capacity to attract great sessional lecturers, the Faculty should find a way to permit the Director to make multi-term offers to sessional lecturers.**

Hire an additional full time Lecturer - Status: **Decided Not to Implement**

The program agrees in full with this recommendation. The program is well aware of the current financial realities of UW and the Faculty of Arts. The Chair of Psychology and the Dean of Arts discussed this and while both agreed it would certainly enhance the program, it was judged to be unaffordable at this time. Given the person resource demands of the Psychology undergraduate Major and Minor (as well as graduate programming demands), an additional CTL (or teaching stream faculty) would need to be a new line (verses being drawn from our existing faculty complement).

Multi term sessional contracts – Status: **To be implemented September 2022**

With approval from the Dean, we planned to implement this for September 2020 but due to the pandemic and early uncertainties about the availability of sessional lines (i.e., we were asked by the Dean’s office to substantially reduce our Department/Program sessional assignments early in the pandemic), this was not implemented. We are strongly committed to providing more

security to our sessional instructors and plan to provide multi-term contracts to the majority of the established/senior instructors in the HRM program beginning with the Fall 2022 semester.

### **Recommendation # 2: Accounting Course**

**Accounting Course.** We had triangulating feedback from students, alumni, and faculty, that the current required accounting course is problematic. We do not pretend to know the best way to do so, but possible solutions might include a dedicated section of AFM 123 targeted at this audience or the development of a different course more appropriately targeted at this audience. This latter solution raises another valuable question, which is whether AFM 123 is in fact “the right course” for the program. Again, we are not equipped to offer a recommendation in that respect. We encourage new collaborative efforts with the content experts in SAF, and the involvement of SAF’s leadership in that process as appropriate.

#### **Status: Decided Not to Implement**

Following discussions with SAF and given ongoing modifications to course delivery due to the pandemic, we decided to not take action to change the AFM 123 course requirement or delivery for HRM Minor students. We will continue to monitor student feedback and progression through the Minor to ensure that this course is not a hindrance to students completing the HRM Minor.

**Recommendation #3 - Expansion of the target audience / streaming.** As noted, the program is very well designed and delivered for its current target audience – students who may wish to pursue formal HR accreditation with a professional body. Our reflection, for the consideration of the program leadership, is that it may be worthwhile to add additional HR-relevant courses to the acceptable list that do not, necessarily, meet CHRL requirements.

#### **Status: Complete**

The reviewers noted that the HRM program is so well received that it should consider expanding the scope to encourage students across campus with a “passing-to-deep interest” in HR-relevant materials to pursue this minor even if they do not wish to seek formal professional accreditation. A non-professional accreditation stream would allow for a more flexible set of courses (verses the strict requirements for professional certification eligibility). Due to financial constraints we are currently unable to expand our HRM course offerings. We have, however, worked to make it abundantly clear to potential students that it is possible to complete the minor *without* planning to meet the certification requirements of the CHRP through the Human Resources Professional Association of Ontario.

**Recommendation # 4 – Continuity of HR Club.** It was noted that the strength of the HR Club was variable from term to term, and that when strong, it was a significant positive contributor to the student experience and the program’s reputation in a number of ways. We simply note that the staffing recommendations made here may create capacity to better support the strength of this important club.

Status: - **Complete**

We continue to support any initiative suggested by the HR Club. The Club has seen challenges in student participation over the past several years, and particularly during the pandemic. We are optimistic that the students will return to planning initiatives once the transition back to in-person learning is complete (i.e., Fall 2022).

**Recommendation # 5 – HR Software course.** Students and alumni unanimously agreed that exposure to HR platforms (e.g., WorkDay, PeopleSoft, Cognos) would be advantageous to students, and significantly enhance their capacity to compete for jobs in the marketplace. We recommend that the program investigate ways to make this possible.

Status: **Did Not Implement**

Will be considered at a later date once we determine action plans for item 2, 3.

**Recommendation # 6 - Edge and Co-op.** The Director noted the importance of enhancing the work integrated learning opportunities for HR minor students. He identified a desire for more attention from co-op, and a sense of hopefulness about the role that the new Edge program might play in addressing those needs. We simply recommend that the Director continue to pursue these strategies, and that his Department Chair and Dean offer what support they can to his efforts. We acknowledge that the active engagement of a Chair and/or Dean can sometimes be necessary to advance an agenda in a complicated landscape.

Status: **In Progress**

The program is strongly committed to providing work integrated learning opportunities for HRM students. Given the number of students, though, this is an enormous task. The program requires dedicated support from the Edge and/or Co-op office to identify HR-specific placements in the community. This job is simply too much for the Director to take on in addition to his other responsibilities. In early 2022, the program had very productive meetings with staff from Edge/Co-op. We are optimistic about collaborative programming moving forward although this is exactly the type of initiative that would require an additional CTL (or teaching stream faculty member) dedicated to the HRM program. We were thrilled to learn that HR is one of the 7 industries that the Co-op Business Developers and Account Managers are targeting for new jobs for Arts students in their 2021-2023 Business Development Plan. We believe this added focus will help to market the program externally and enhance the employability of our students upon graduation.

**Recommendation # 7 - Marketing.** Put simply, not enough people on this campus know about this fabulous program. Further, prospective students of the university may also be less aware than they should be. We encourage the program, the department, the faculty, and Marketing and Undergraduate Recruitment to invest effort and resources in addressing the “awareness deficit” that we perceive.

Status: **In progress**

Response, in the words of the reviewers, “...not enough people on this campus know about this fabulous program.” The program is proud to hear this sentiment and agrees! The program met with Arts Marketing staff in Fall 2019 to discuss strategies for raising student awareness of the program as part of initial recruitment efforts (i.e., presentations to high schools) and again in October 2020. The program continues to market this program whatever possible, realizing that there are limitations to the marketing of this program given it is only a minor and not a major.

**Recommendation #8 - If new financial resources are required:** If it is determined that some of the recommendations here, or other future directions of value, require additional financial resources, we have a suggestion for how to raise them. Specifically, program leadership could investigate slightly fewer offerings of some classes with slightly larger class sizes. When students were asked whether classes of 40-45 would still be sufficiently intimate to achieve objectives (vs. 30’ish currently), their response was “generally yes”. They did, however, note that this was truer for some classes than others.

Status: **Decided Not to Implement**

The reviewers were highly sensitive to the financial realities currently faced at UW. As such, they noted that by increasing the enrollment caps on some HRM courses, the program could, in essence, generate funds to support the need for more staffing. The enrollment cap for all HRM 300 level courses has always been set at 80 students to ensure no students are denied enrollment. However, enrollments remain between 30 and 40 students in most courses. We will continue to monitor our enrollments relative to the caps carefully.

### Updated Implementation Plan

	Recommendations	Proposed Actions	Responsibility for Leading and Resourcing (if applicable) the Actions	Timeline for addressing Recommendations
1b.	Staffing. 2. Multi-term sessional contracts. In order to provide stability and give the Director the capacity to attract great sessional lecturers, the Faculty should find a way to permit the Director to make multi-term offers to sessional lecturers.	Multi term sessional contracts for several instructors proposed to be offered.	Heather Henderson Vince Di Ruzza Janice da Silva	September 2022
3.	Expansion of the target audience / streaming. As noted, the program is very well designed and delivered for its current target audience – students who may wish to pursue formal HR accreditation with a professional body. Our reflection, for the consideration of the program leadership, is that it may be worthwhile to add additional HR-relevant courses to the acceptable list that do not, necessarily, meet CHRL requirements.	Due to financial constraints, we are currently unable to expand our HRM course offerings. We have, however, worked to make it abundantly clear to potential students that it is possible complete the minor <i>without</i> planning to meet the certification requirements of the CHRP through the Human Resources Professional Association of Ontario.	Vince DiRuzza Heather Henderson Richard Eibach HR Program/Student Advisor	Complete
4.	Continuity of HR Club. It was noted that the strength of the HR Club was variable from term to term, and that when strong, it was a significant positive contributor to the student experience and the program’s reputation in a number of ways. We simply note that the staffing recommendations made here may create capacity to better support the strength of this important club.	Current committee members were not successful in the continuous of the group during pandemic. Plans in place for Winter 2022 re-establishment.	Vince Di Ruzza HR Program Student Advisor	Complete. Ongoing support and guidance will be provided to the HR Society. Full support will be provided by all HRM Lecturers.



6.	<p>Edge and Co-op. The Director noted the importance of enhancing the work integrated learning opportunities for HR minor students. He identified a desire for more attention from co-op, and a sense of hopefulness about the role that the new Edge program might play in addressing those needs. We simply recommend that the Director continue to pursue these strategies, and that his Department Chair and Dean offer what support they can to his efforts. We acknowledge that the active engagement of a Chair and/or Dean can sometimes be necessary to advance an agenda in a complicated landscape</p>	<p>Continued partnership meetings held with both EDGE and Co-op. Co-op has implemented major focus to the HRM minor program. They have developed strategies to support the HRM minor students. Discussions are on-going with EDGE, we are working together to ensure any potential opportunities. As of Jan 31, 2022: Specific Co-op Development Plans have been developed and put in place for 2021 to 2023.</p>	<p>Vince Di Ruzza HR Program Student Advisor Heather Henderson</p>	<p>In Progress Jan 2022 – Specific Co-op Development Plans have been developed and put in place for 2021 to 2023. Update meetings will be held regularly.  Jan 2022 – EDGE and HRM will continue to work in partnership to see if any initiative can be implemented. Update meetings will be held regularly.</p>
7.	<p>Marketing. Put simply, not enough people on this campus know about this fabulous program. Further, prospective students of the university may also be less aware than they should be. We encourage the program, the department, the faculty, and Marketing and Undergraduate Recruitment to invest effort and resources in addressing the “awareness deficit” that we perceive. This is an ongoing initiative. Meetings with Arts Marketing staff will continue to ensure support is received and plans put in place for</p>	<p>Support to be established with and through the Arts Communications office.</p>	<p>Vince Di Ruzza Heather Henderson Richard Eibach</p>	<p>September 2022</p>

	this unique minor program which is not under the umbrella of a full major.			
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The Department Chair/Director, in consultation with the Dean of the Faculty shall be responsible for monitoring the Implementation Plan.

Date of next program review: \_\_\_\_\_ **2025-2026** \_\_\_\_\_  
Date

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Signatures of Approval:

*Heather A. Henderson*

March 8, 2022

Chair/Director

Date

AFIW Administrative Dean/Head (For AFIW programs only)

Date

*D. M. P.*

March 16, 2022

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.

*Dan De Vidi*

July 24, 2023

Associate Vice-President, Academic

Date

(For undergraduate and augmented programs)

On Behalf of Associate Vice-President, Graduate Studies and Postdoctoral Affairs

# Two-Year Progress Report Earth Sciences (BSc, Minor, MSc, PhD) and Environmental Sciences (BSc) June 2022

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## Background

In accordance with University of Waterloo's Quality Assurance Process (IQAP), the various undergraduate and graduate academic programs offered by the Department of Earth and Environmental Sciences underwent an external review in November 2019. The [Final Assessment Report](#) was approved at Senate in January 2022. A total of 10 recommendations were made for consideration. This document is a progress report on each of the recommendations.

## Enrollment over the past two years

	Earth Sciences BSc		Environmental Sciences BSc		Earth Sciences Minor	Earth Sciences MSc	Earth Sciences PhD
	H	HC	H	HC			
Fall 2022	34	61	115	76	20	44	44
Fall 2021	40	51	111	60	30	53	42
Fall 2020	48	51	63	63	27	64	42
Fall 2019	53	55	22	54	21	54	35
Fall 2018	60	54	20	48	12	62	44

## Progress on Implementation Plan

### Recommendation 1

*Overall the curriculum is consistent with other Canadian and international geoscience and environmental programs and meets professional accreditation standards. Some small tweaks are possible; both identified in the self-study report and in this evaluation. In other words, we do not feel that a major overhaul is needed. Course descriptions should be updated in describing content, and could include major themes in Earth and Environmental Sciences such as tectonics, climate change, sustainability, etc.*

**Status:** In progress

**Details:** The recommended review of the courses has been completed to ensure that course titles, descriptions and prerequisites have been clarified. These revisions have been taken through the formal approval process and will appear in future undergraduate academic calendars.

After completing this process, the departmental Undergraduate Committee began planning for a comprehensive curriculum review of all of our degree specializations. To this end, a Curriculum Review Committee was formed to carry out this task. A major objective will be the development of a detailed mapping of course content to identify the important scientific concepts and professional skills intended to be acquired by students within each specialization. This review will seek to eliminate unnecessary overlaps/redundancies and identify gaps that currently exist in our program's various specializations.

Given the number of recent faculty additions to the department, this review will also seek to capitalize on this infusion of new expertise in modernizing our program. An example of one such modification currently under consideration is the replacement of EARTH 358 (Earth System Science) with EARTH 355 (Data to Decisions) as a degree requirement. This change will replace a course with poor student reviews and ill-defined content with one that teaches the quantitative and coding skills that students currently seek.

Another curriculum modification being considered is the creation of a common first year program for our Earth Sciences specializations to parallel the common first year program currently existing for the Environmental Sciences specializations. This modification can be done with only minor alterations that will have little, if any, impact on academic outcomes. This change, however, is expected to increase the sense of community and comradery in the first-year cohort and allow students to postpone the choice of their specialization until after exposure to their first year courses.

## **Recommendation 2**

*The department can and needs to continue to increase the number of undergraduate students. In discussions with faculty it was felt there is still room for additional undergraduate student capacity. That said, the department needs to be very careful with regards to limits of faculty and lecturer time and departmental resources.*

**Status:** In progress

**Details:** As stated in our initial response, undergraduate recruiting is a major focus for the Department and we are continuing to pursue a number of initiatives. To further enhance these efforts, we have recently formed a departmental Recruitment Committee (headed by Professor David Rudolph, former Department Chair) to oversee and coordinate recruitment activities.

In addition, we are considering the creation of a common first year program for our various Earth Sciences specializations as mentioned earlier, and this change is anticipated to improve recruiting effectiveness by having a single, overall Earth Sciences focus, in contrast to the more fragmented recruitment effort needed for three distinct Earth Sciences programs.

### **Recommendation 3**

*An issue at many universities, including Waterloo, is confusion around environment programs on campus. As discussed, having a Faculty of Environment (without a BSc program) and a Department of Earth and Environmental Sciences (in the Faculty of Science) is leading to confusion. Many interviewees specifically mentioned the development of a Geography BSc. While it seemed that no-one had seen the proposed curriculum, it is assumed that there will be some overlap with the EES environment program. The integration and overlap of these two programs should be addressed.*

**Status:** In progress

**Details:** Since our initial report, the Department of Geography and Environmental Management (GEM) within the Faculty of Environment has obtained approval for a BSc in Climate and Environmental Change and has recently started this program. While we continue to monitor possible impacts this new degree program may have on enrolment in our undergraduate programs, we are working hard to ensure that potential applicants to environmental sciences programs at Waterloo are aware of the advantages of our specific program offerings in this area. The significant differentiators include: (1) a strong foundation of science courses in our three Environmental Sciences programs, (2) curriculums that ensure the educational qualifications to attain licensure as a Professional Geoscientist (P. Geo.), and (3) the high demand from employers for our graduates, as well as co-op jobs for our students.

### **Recommendation 4**

*We felt there was potential scope for more online courses. In the Canadian university earth science departments, we do not know of many other online course offerings. In particular, courses that would be for degree credit have potential (as opposed to MOOCs or general interest courses).*

**Status:** In progress

**Details:** The EES Department has continued its effort to increase the offering of fully online courses. At the time of the program review, EES offered only one fully online course (EARTH 121 - Introductory Earth Sciences); that course has now successfully run for a number of Fall and Spring terms. Subsequently, two more courses (EARTH 122 - Introductory Environmental Sciences and EARTH 123 - Introductory Hydrology) have been approved for the development of fully online versions and resources have been allocated for that purpose.

The first of these courses for which an online version was developed is EARTH 123. The first offering was in Spring 2023. There is an on-campus version of this course offered in the Fall 2023. The development of the fully online version of EARTH 122 has just been completed. The first offering will be in Fall 2024. The timing of these two new fully online courses was judged to be the best to not compete with the on-campus offerings. Hence, by the end of 2024, EES will have all three of our first-year courses (EARTH 121, 122, and 123) available in a fully online format. In Fall 2023 a new blended version of EARTH 121 is being piloted with Earth and Environmental Sciences students using online components and tutorials.

We are also planning the next phase of developing other fully online undergraduate courses. Priority is being placed on the two second year, general interest, higher enrolment courses (EARTH 270 - Disasters and Natural Hazards and EARTH 281 - Geological Impacts on Human Health). In addition, we are considering the possible development of fully online versions of selected upper-level EARTH courses. While many of the upper-level EARTH courses have lower enrolments and significant course components that are not easily converted to an online environment, EARTH 444 (Applied Wetland Science) and EARTH 458 (Physical Hydrogeology) are potential candidates for development.

#### **Recommendation #5**

*There is potential scope for a Professional MSc in Hydrogeology or a related field. The first step is for EES to develop a business plan that clearly lays out the potential risks and benefits of such a program.*

**Status:** In progress

**Details:** The Department recently started to discuss the feasibility of offering a mostly online professional course-based masters program with capstone project, rather than a thesis, focused on our long-standing strengths in hydrogeology. This degree program is intended to be a terminal degree (similar to an MBA as opposed to an MSc). Some elements of this program are likely to require in-person field methods activities/short courses. We expect significant interest in such a program to be from students from programs offered outside of Earth Sciences departments; accordingly, a key driver for the curriculum of this program will be that graduates become technically qualified to work as Professional Geoscientists. The mainly online delivery of this graduate program should be attractive to working professionals seeking to upgrade their qualifications.

We expect to begin this work in Fall 2022, headed by one of our faculty members with experience in establishing a similar program elsewhere. The initial work will involve a survey of similar programs at other institutions in North America, to better understand the competition and to optimally position our offering.

#### **Recommendation 6**

*At the undergraduate level, the students are overall satisfied and feel a close sense of community within EES. It was clear that the undergraduate thesis course requires additional clarification in terms of guidelines, student feedback, and engagement, but the focus on a thesis is certainly a valuable component of their training and professional development.*

**Status:** In progress

**Details:** As acknowledged in the initial report, EES recognizes the need for the improvement of the undergraduate thesis courses (EARTH 436A and EARTH 436B). The course format was significantly changed for the 2019-2020 academic year, and we have closely monitored the course to determine the effects of these changes. A major change was the implementation of standard class hours and activities for the first portion of the thesis course (EARTH 436A). This allowed students to meet expectations and

the early deadlines for the development of their projects along with helping them develop a better understanding of how to appropriately design an undergrad thesis.

While significant improvement has been made in terms of conveying the necessary elements of the thesis process to the students, we need to make further improvements in the monitoring of both student and supervisor activities to achieve successful and timely completion of course milestones. This will be one of the primary goals of the new course administrator who will take over EARTH 436A and 436B in the Fall 2022 term.

### **Recommendation 7**

*The graduate students would benefit from a formalized 'new graduate student' orientation. While the staff and faculty are easily available for answering graduate student inquiries, the students we spoke with identified initial struggles with understanding the bureaucracy and steps required to commence their graduate degrees (especially for those who did not do their undergraduate degree in EES or at Waterloo). A new graduate student orientation session, mentoring program, and/or an EES graduate student handbook would assist alleviate this issue.*

**Status:** In progress

**Details:** As indicated in the initial response, the Department has a Graduate Student Handbook (on the EES website) which is sent to all incoming Graduate students upon arrival and is available to all instructors and students. It is updated regularly and is intended to provide all the information that should be required to get through the program as well as the most important and useful web links to important university, Faculty of Science, and Graduate Studies and Postdoctoral Affairs resources for graduate students. Following consulting with graduate students, we created a Microsoft Teams channel to host all relevant documents and to enhance our communication with students. We have resumed our orientation (meet and greet) session for new graduate students (starting in September 2021 though Teams), at which we have a PowerPoint presentation giving new students most pertinent information, reminding existing students of the same and answering any questions they may have. The Department also has a very active Earth Sciences Graduate Association (ESGA) and helps sponsor its activities. The annual Logan Day celebration in September, curling event in the winter and in particular the weekly “Geocafe” talks at the Grad House provide good opportunities for graduate students at various stages of the program to interact and learn from each other. To enhance the communication with graduate students, we have invited an ESGA representative to attend the monthly Department meeting. Through the varied initiatives outlined above, we are able to obtain regular feedback from our graduate students to ensure we are meeting their needs in a timely and effective manner.

### **Recommendation 8**

*We were impressed with Environmental Isotope Laboratory (EIL) as a global recognized core facility that serves both outer and inner users. Budget revenue should be shared with the department versus merely sustainment. Should this be a pan-university centre or institute for isotope analysis?*



**Status:** Completed

**Details:** As indicated in our original response to this recommendation, the EIL is a multi-user EES facility and is not driven by any individual faculty member's research program, as are many other laboratory facilities in the Faculty of Science. This facility is recognized as a core facility – the only other departmental facility with a similar broad user base is the Hydrogeology lab facility. The EIL employs 9 full-time and 3-4 part-time and student employees in addition to 2-3 UW co-op students annually, and has an annual gross revenue of approximately \$1,000,000. Its significant annual carryforwards allow it to plan for equipment upgrades and be prepared for emergency repairs, and other contingencies. These purchases are often in the hundreds of thousands of dollars and require several years to accumulate. The Faculty of Science is moving forward to bring existing core facilities under a broader Faculty umbrella. However, the Dean of Science has allowed the EIL to continue operating within its current administrative framework. We expect to regularly revisit the administrative model of the EIL to ensure it remains responsive to the demands from its internal and various external users, while continuing to attract the necessary financial resources to ensure its long-term viability.

### **Recommendation 9**

*Based on our discussions, we feel that the Department should develop a strategic plan, specifically in the area of hiring priorities. As discussed in meetings and in the self-study report, there are upcoming potential retirements. With the recent cluster of water related hires, the Department must now develop a plan for the next hires. The department's strategic plan should also rationalize its specialized programs with respect to faculty who can teach the courses. For example, it is our understanding that in the area of geophysics, there is only one faculty member and one definite term lecturer in EES. This creates an inequitable teaching and resource distribution that is not sustainable in the long term and can be dealt with by either closing or broadening the geophysics program and/or hiring additional faculty in this researcher area. Ensure utmost attention to improving gender diversity in faculty, via future hires.*

**Status:** In progress

**Details:** As explained in the Final Assessment Report, the recent hires made at that time, besides helping to address the gender imbalance in our department, were also anticipated to bring additional breadth to our strengths in water-related research. At that time, we made the conscious decision to allow these new hires to begin to establish themselves before immersing the department in conversations concerning our future directions. There are also a number of looming retirements of senior faculty. We are now ready to have an informed and inclusive discussion of a departmental strategic plan. The plan will focus on two thematic areas.

The first thematic area is an academic plan which will include a critical review of our existing programs to ensure their curricula reflect the current priorities of a comprehensive geoscience education, as well as to ensure our students are fully qualified to seek professional licensure (where appropriate). This work has started in the last year with updates at the course-level (calendar descriptions, titles, prerequisites, etc. – see progress report on Recommendation 1 above). At the graduate level we have

also started discussion on a professional course-based, mainly online masters program with capstone project focused on our long-standing strengths in hydrogeology (described in our current response to Recommendation 5 above). The academic plan will also help shape our approaches to student recruitment, an area of ongoing concern in our department and in geoscience departments across the country.

The second theme of the strategic plan – faculty renewal - will focus on future research directions, taking into account the infusion of new research expertise of our recent hires as well as the potential loss of research expertise due to imminent retirements. All of our faculty will be encouraged to participate so as to ensure a critical and transparent appraisal of how and where we can make the most significant impact as a department.

The creation of a strategic plan (academic and faculty renewal themes) will start in the Fall 2022 term and is anticipated to be completed by December 2023.

#### **Recommendation 10**

*We understand that introduction of the activities-based budget model has put the Faculty of Science and EES under stress. The university should develop clear metrics for reconciliation of budgets and appropriate scale of EES (numbers of students, budgets, outcomes). This should include efforts by senior administration to reconcile the broader value of EES as a key component of the “environmental” theme at Waterloo to ensure continued health and success of EES and the Faculty of Science.*

**Status:** In progress

**Details:** Our response to this recommendation in the Final Assessment Report indicated our intention to increase undergraduate enrolment, expand research activities, attract endowment funding and seek new ways of growing revenue (e.g., new course-based graduate program) to demonstrate and enhance our role in the Faculty and University. The details, implementation and reporting metrics related to the new Waterloo Budget Model (WBM), however, are determined at the Faculty level and higher. The recent external review of the WBM has pointed to the need for changes to the structure of the WBM and the need to integrate budget planning with other planning processes at the University. We anticipate that once there is the enhanced clarity on the WBM, departments, such as Earth and Environmental Sciences, will be in a better position to plan.

#### **Explain any circumstances that have altered the original implementation plan**

N/A

#### **Address any significant developments or initiatives that have arisen since the program review process, or that were not contemplated during the review**

N/A

#### **Report on anything else you believe is appropriate to bring to Senate concerning this program**

N/A

### Updated Implementation Plan

	<b>Recommendations</b>	<b>Proposed Actions</b>	<b>Responsibility for Leading and Resourcing (if applicable) the Actions</b>	<b>Timeline for addressing Recommendations</b>
1.	<i>Course descriptions should be updated in describing content, and could include major themes in Earth and Environmental Sciences such as tectonics, climate change, sustainability, etc.</i>	<ul style="list-style-type: none"> <li>Comprehensive curriculum review of all undergraduate degree specializations</li> </ul>	<ul style="list-style-type: none"> <li>Curriculum review committee</li> <li>Associate Chair, undergraduate studies</li> <li>Department Chair</li> </ul>	<ul style="list-style-type: none"> <li>First phase completed (updating course descriptions)</li> <li>Dec. 2023 for comprehensive curriculum review</li> </ul>
2.	<i>Continue to increase the number of undergraduate students</i>	<ul style="list-style-type: none"> <li>Critically assess recruitment efforts</li> <li>Consider feasibility of a common first year program for the Earth Sciences specializations</li> </ul>	<ul style="list-style-type: none"> <li>Recruitment Committee</li> <li>Associate Chair, undergraduate studies</li> <li>Department Chair</li> <li>Director, Geological Engineering</li> <li>Science outreach staff</li> </ul>	April 2023
3.	<i>The integration and overlap of the Faculty of Environment BSc in Climate and Environmental Change and EES' environmental programs should be addressed.</i>	<ul style="list-style-type: none"> <li>Continue to monitor possible impacts on enrolment in EES programs</li> <li>Ensure potential applicants to environmental sciences programs at Waterloo are aware of the advantages of EES program offerings in this area.</li> </ul>	<ul style="list-style-type: none"> <li>Recruitment Committee</li> <li>Associate Chair, undergraduate studies</li> <li>Department Chair</li> <li>Science outreach staff</li> </ul>	Ongoing
4.	<i>Explore potential scope for more online courses, especially courses for degree credit</i>	<ul style="list-style-type: none"> <li>Engaged in continuous planning to roll-out online undergraduate courses, soon</li> </ul>	<ul style="list-style-type: none"> <li>Associate Chair, undergraduate studies</li> <li>Departmental Teaching Fellow</li> </ul>	Ongoing

		<p>to include selected 2<sup>nd</sup> year and more advanced courses</p> <ul style="list-style-type: none"> <li>• Focus will be courses with high enrolments as well as those that address academic requirements for professional licensure (e.g., EARTH 281, 458)</li> </ul>	<ul style="list-style-type: none"> <li>• Department Chair</li> </ul>	
5.	<i>Explore the feasibility of a professional MSc in Hydrogeology or a related field.</i>	<ul style="list-style-type: none"> <li>• Develop a business plan informed by surveying similar programs at other institutions in North America, including examining potential risks and benefits of such a program in our department, and understanding how to best leverage our assets to optimally position our offering</li> </ul>	<ul style="list-style-type: none"> <li>• Special service task to faculty member with experience developing a similar program elsewhere</li> <li>• Associate Chair, graduate studies</li> <li>• Department Chair</li> </ul>	Start in Fall 2022; complete in December 2023
6.	<i>The undergraduate thesis course requires additional clarification in terms of guidelines, student feedback, and engagement.</i>	<ul style="list-style-type: none"> <li>• Make further improvements in the monitoring of both student and supervisor activities in our thesis courses (EARTH 436A, 436B) to achieve timely and successful completion of course milestones.</li> </ul>	<ul style="list-style-type: none"> <li>• EARTH 436A,B instructor</li> <li>• Associate Chair, undergraduate studies</li> <li>• Department Chair</li> </ul>	Start in Fall 2022; complete in December 2023
7.	<i>A new graduate student orientation session, mentoring program, and/or an EES graduate student handbook would assist graduate students in understanding the bureaucracy and</i>	<ul style="list-style-type: none"> <li>• Graduate student handbook (online) will continue to be updated regularly so as to provide information required</li> </ul>	<ul style="list-style-type: none"> <li>• Associate Chair, graduate studies</li> <li>• Graduate Administrative Coordinator</li> </ul>	Ongoing

	<i>steps required to commence their graduate degrees</i>	<p>to get through the program as well as key web links</p> <ul style="list-style-type: none"> <li>• Continue using a Microsoft Teams channel to host all the relevant documents and enhance our communication with students.</li> <li>• Resume our orientation (meet-and-greet) sessions for new students</li> <li>• Monthly Department meetings now include a graduate student representative</li> <li>• Department will continue to support graduate student-focused events</li> </ul>	<ul style="list-style-type: none"> <li>• Department Chair</li> </ul>	
8.	<i>Environmental Isotope Laboratory (EIL) budget revenue should be shared with the department versus merely sustainment. Should this be a pan-university centre or institute for isotope analysis?</i>	<ul style="list-style-type: none"> <li>• Following extensive discussions at the Faculty level concerning core and individual research facilities, the Dean of Science has allowed the EIL to continue operating using its current administrative framework to service both internal and external users.</li> </ul>	<ul style="list-style-type: none"> <li>• EIL Manager</li> <li>• Department Chair</li> <li>• Dean of Science</li> </ul>	Completed
9.	<i>Department should develop a strategic plan, specifically in the area of hiring priorities...The department's strategic plan should also rationalize its specialized</i>	<ul style="list-style-type: none"> <li>• Develop an academic plan to include a critical review of our existing programs to ensure curricula reflect the current</li> </ul>	<ul style="list-style-type: none"> <li>• Executive Committee</li> <li>• Departmental faculty, staff and students</li> <li>• Department Chair</li> </ul>	Start in Fall 2022; complete in December 2023

	<i>programs with respect to faculty who can teach the courses. ...Ensure utmost attention to improving gender diversity in faculty, via future hires.</i>	<p>priorities of a comprehensive geoscience education, as well as to ensure our students are fully qualified to seek professional licensure</p> <ul style="list-style-type: none"> <li>• Develop a faculty renewal plan focusing on future research directions that also support the academic plan, taking into account the infusion of new expertise of our recent hires</li> </ul>		
10.	<i>We &lt;i.e., the reviewers&gt; understand that introduction of the activities-based budget model has put the Faculty of Science and EES under stress. The university should develop clear metrics for reconciliation of budgets and appropriate scale of EES (numbers of students, budgets, outcomes). This should include efforts by senior administration to reconcile the broader value of EES as a key component of the “environmental” theme at Waterloo to ensure continued health and success of EES and the Faculty of Science.</i>	<ul style="list-style-type: none"> <li>• The recent external review of the Waterloo Budget Model (WBM) points to needed changes to the WBM. With the anticipated clarity, we will be in a better position to plan actions related to increasing undergraduate enrolment, expanding research activities, attracting endowment funding and seeking new ways of growing revenue.</li> </ul>	<ul style="list-style-type: none"> <li>• Department Chair</li> <li>• Dean of Science</li> <li>• Provost</li> </ul>	Ongoing

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

Date of next program review: \_\_\_\_\_ **2025-2026** \_\_\_\_\_  
Date

Signatures of Approval:



July 24, 2023

Chair/Director

Date

AFIW Administrative Dean/Head (For AFIW programs only)

Date

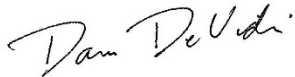


July 24/23

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.



July 24, 2023

Associate Vice-President, Academic

Date

(For undergraduate and augmented programs)

On Behalf of Associate Vice-President, Graduate Studies and Postdoctoral Affairs

# NEW UNDERGRADUATE SCHOLARSHIPS, AWARDS, and BURSARIES

to be added to the Undergraduate Awards Database

- submitted for October 17, 2023 meeting of Senate Undergraduate Council -

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## **ENTRANCE AWARDS**

### **Jean Andrey Environment Leadership Scholarship**

A scholarship, valued at up to \$7,500, will be awarded annually to a full-time undergraduate student entering Year One of any program in the Faculty of Environment (including Sustainability and Financial Management). Selection is based on academic excellence (minimum 85% admission average) combined with leadership potential and interest in environmental issues, as evidenced by involvement in extracurricular and/or volunteer activities. Interested students are required to complete the Admission Information Form as well as submit an award application through the Faculty of Environment by mid-April. This fund is made possible by donations from friends, alumni, and faculty of the Faculty of Environment in honour of Jean Andrey, former Dean of the Faculty of Environment.

*Method of Financing: endowment (plus faculty matching funds)*

### **Lloyd Axworthy Scholarship**

Up to two scholarships, valued at up to \$10,000 each, are awarded annually to outstanding undergraduate students in the Faculty of Arts who intend to pursue the Human Rights minor and enrol in HRTS 101 during their first term. Selections will be based on academic excellence (minimum admission average of 85%) and a statement outlining their interest and commitment to human rights. Recipients will receive a \$7,000 residence credit at United College (split between 1A and 1B) during their first year. In Year Two, Three, and Four students will be eligible to receive \$1,000 per year provided they remain in good academic standing in the Human Rights minor and demonstrate leadership in the United College community. An application is due in mid-April; refer to the United College website for full details. This scholarship was created in honour of Lloyd Axworthy, the first chancellor of United College (previously St. Paul's University College).

*Method of Financing: United College funds*

### **Dianne Beveridge Memorial Entrance Scholarship in Science**

A scholarship, valued at \$2,000, will be awarded annually to a full-time undergraduate student entering Year One of any program in the Faculty of Science. Selection is based on academic excellence (minimum 90% admission average) combined with extracurricular and leadership involvement as assessed through the Admission Information Form (AIF). Students must complete the AIF to be considered. This scholarship is made possible by a donation from AYVA Educational Solutions and PASCO Scientific in memory of founder, Dianne Beveridge (BSc '82), who used her passion for STEM education to become a leader in business, education, and within her community.

*Method of Financing: annual donation (five-year pledge)*

### **Sooi Chong Entrance Scholarship in Chemical Engineering**

Five scholarships, valued at \$5,000 each, will be awarded annually to full-time undergraduate students entering Year One of the Chemical Engineering program. This fund is made possible by a donation from Sooi Chong (MAsc '66, Chemical Engineering) in support of the next generation of Engineering students.

*Method of Financing: annual donation (five-year pledge)*

### **Faculty of Mathematics Entrance Scholarship for Black Students**

Several scholarships, valued from \$10,000 to \$20,000 each, paid over eight academic terms, will be provided to Black domestic undergraduate students (Canadian citizen, Permanent Resident, or Protected Person) entering Year One of any full-time degree program in the Faculty of Mathematics. Selection will be based on a combination of academic achievement and community involvement through extracurricular and/or volunteer activities. Preference will be given to students who best demonstrate what receiving this award would mean to their pursuit of post-secondary studies. To be considered, students must submit an award application by April 15. The scholarship will be issued in eight equal payments (1A-4B). Payments beyond Year One are dependent on maintaining a minimum overall average of 80% and full-time enrolment in the Faculty of Mathematics.

*Method of Financing: Faculty funds*



## NEW UNDERGRADUATE SCHOLARSHIPS, AWARDS, and BURSARIES

to be added to the Undergraduate Awards Database

- submitted for October 17, 2023 meeting of Senate Undergraduate Council -

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### **Faculty of Mathematics Entrance Scholarship for Black International Students**

Several scholarships, valued at \$20,000 to \$40,000 each, paid over eight academic terms, will be provided to Black international undergraduate students (study permit, paying international fees) entering Year One of any full-time degree program in the Faculty of Mathematics. Selection will be based on a combination of academic achievement and community involvement through extracurricular and/or volunteer activities. Preference will be given to students who best demonstrate what receiving this award would mean to their pursuit of post-secondary studies. To be considered, students must submit an award application by April 15. The scholarship will be issued in eight equal payments(1A-4B). Payments beyond Year One are dependent on maintaining a minimum overall average of 80% and full-time enrolment in the Faculty of Mathematics.

*Method of Financing: Faculty funds*

### **Federation of Chinese Canadian Professionals (Ont.) Education Foundation Entrance Scholarship in Accounting**

One scholarship, valued at \$1,000, is awarded annually to an outstanding student entering Year One of an Accounting program either in the Faculty of Arts or the Faculty of Mathematics. This award is made possible by a donation from the Federation of Chinese Canadian Professionals (Ont.) Education Foundation.

*Method of Financing: annual donation (five-year pledge)*

### **Guo Family Engineering Scholarship**

A scholarship, valued at \$5,000, will be provided annually to a full-time undergraduate student entering Year One of any program in the Faculty of Engineering. This fund is made possible by a donation from Terry Guo (BASC '01, Computer Engineering) to support the next generation of engineering talent.

*Method of Financing: annual donation (two-year pledge)*

### **Kish Hahn Memorial Award for Systems Design Engineering**

One award, valued at up to \$3,400, will be provided to undergraduate students entering Year One of Systems Design Engineering. Selection will be based on exceptional promise for systems design and systems thinking as assessed through the Admission Information Form and the online video interview completed during application for admission. This fund is made possible by donations from family and friends in honour of Professor Kish Hahn, a founding professor of Systems Design Engineering at the University of Waterloo.

*Method of Financing: endowment*

### **Michaëlle Jean Scholarship**

Up to three scholarships, valued at up to \$10,000 each, are awarded annually to outstanding undergraduate students entering Year One of the International Development program in the Faculty of Environment. Selection is based on academic excellence (minimum admission average of 85%) and a statement outlining their previous volunteer, leadership, and/or sustainability-related activities in their communities. Recipients will receive a \$7,000 residence credit at United College (split between 1A and 1B) during their first year. In Year Two, Three, and Four students will be eligible to receive \$1,000 per year provided they remain in good academic standing in the International Development program and demonstrate leadership in the United College community related to the International Development program. An application is due in mid-April; refer to the Faculty of Environment website for full details. This scholarship was created in honour of Michaëlle Jean, the former Governor General and current Chancellor of United College. Recipients of this award will be known as Michaëlle Jean Scholars.

*Method of Financing: United College funds*

## NEW UNDERGRADUATE SCHOLARSHIPS, AWARDS, and BURSARIES

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#### **Tom McColeman Entrance Bursary**

A bursary, valued at \$2,000, will be awarded annually to an undergraduate student entering Year One of the Mechanical Engineering program who has demonstrated financial need as determined by the University of Waterloo. To be considered, students must complete the University of Waterloo Entrance Bursary application. This fund is made possible by a donation from Tom McColeman (BASc '04, Mechanical Engineering).

*Method of Financing: renewal of annual donation (five-year pledge)*

#### **Professor Josef Paldus Engineering Scholarship**

A scholarship, valued at \$20,000, will be awarded annually to a full-time undergraduate student entering Year One of Biomedical Engineering. Selection will be based on academic excellence (minimum 90% admission average) combined with extracurricular and leadership involvement assessed through the Admission Information Form and the online video interview. This fund is made possible by a donation from Barbara Paldus (BASc '93 Electrical Engineering, BMATH '93) in memory of her father, Josef Paldus, Distinguished Professor Emeritus in Applied Mathematics, and dedicated teacher and researcher, to support the next generation of excellent engineers.

*Method of Financing: annual donation (ten-year pledge)*

#### **RLB Accounting Award for Black and Indigenous Students**

One award, valued at \$2,000, will be provided annually to a Black or Indigenous undergraduate student entering Year One of any program in the School of Accounting and Finance. For the purpose of this scholarship, an Indigenous person is one who is a citizen or member of a First Nations community (Status/Non-Status), Métis, or Inuit. Selection will be based on extracurricular involvement and/or participation in volunteer leadership activities. Interested students should submit an application by April 15. This award is generously funded by RLB LLP. RLB understands that Black and Indigenous students are underrepresented in accounting careers and are committed to taking meaningful steps to give back and help provide access to this career path.

*Method of Financing: annual donation (five-year pledge)*

#### **Roberts Onsite Engineering Entrance Scholarship**

A scholarship, valued at \$2,000, will be awarded annually to an outstanding undergraduate student entering Year One of Civil, Electrical, or Mechanical Engineering. This fund is made possible by a donation from Roberts Onsite.

*Method of Financing: annual donation (five-year pledge)*

#### **Ted Rogers Undergraduate Black Student Award**

Up to four awards, valued at up to \$10,000 each over eight academic terms, will be provided to Black undergraduate students entering Year One of any degree program at the University of Waterloo. Preference will be given to students enrolling in a STEM program. Selection to be based on a combination of academic achievement, extracurricular and/or volunteer involvement, as well as a statement wherein students are asked to describe what receiving this award would mean to them in their pursuit of post-secondary studies. Interested students must complete the Application for Entrance Awards Designated to Black Students by April 15. This award is made possible by funding from Rogers.

*Method of Financing: one-time donation to fund a total of four awards (description provided to acknowledge donation; all selections made in 2023, thus award description will not be added to database)*

## NEW UNDERGRADUATE SCHOLARSHIPS, AWARDS, and BURSARIES

### to be added to the Undergraduate Awards Database

*- submitted for October 17, 2023 meeting of Senate Undergraduate Council -*

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#### **Ted Rogers Undergraduate Indigenous Student Award**

Up to four awards, valued at up to \$10,000 each over eight academic terms, will be provided to Indigenous undergraduate students entering Year One of any degree program at the University of Waterloo. Preference will be given to students enrolling in a STEM program. For the purpose of this award, an Indigenous person is one who is a citizen or member of a First Nations community (Status/Non-Status), Métis or Inuit. As part of the application process, candidates must verify their Indigenous identity with documentation or an affidavit from a recognized Indigenous community. Selection will be based on a combination of academic achievement, extracurricular and/or volunteer involvement, as well as a statement wherein students are asked to describe what receiving this award would mean to them in their pursuit of post-secondary studies. Interested students must complete the Application for Entrance Awards Designated to Indigenous Students by April 15. This award is made possible by funding from Rogers.

*Method of Financing: one-time donation to fund a total of four awards*

#### **Shah Family Engineering Entrance Bursary**

Two bursaries, each valued at \$20,000, will be provided annually to full-time undergraduate students entering Year One of any program in Faculty of Engineering. Selection is based on academic excellence and demonstrated financial need. To be considered, students must complete the University of Waterloo Entrance Bursary application. This fund is made possible by Kris Shah (BASc '86, Electrical Engineering) to remove financial barriers and invest in the future generation of engineering talent.

*Method of Financing: annual donation (five-year pledge)*

#### **Skoczkowski – Lin Entrance Scholarship**

A scholarship, valued at \$6,000, will be awarded annually to a full-time undergraduate student enrolled in Year One of Electrical or Computer Engineering. This fund is made possible by a donation from Lucas Skoczkowski (BASc '97 ECE) who believes in supporting the next generation of students and future leaders.

*Method of Financing: monthly donation (on-going commitment)*

#### **StackAdapt Engineering Entrance Bursary**

A bursary, valued at \$5,000, will be provided to a full-time undergraduate student entering Year One of Computer, Management, Mechatronics, Software or Systems Design Engineering. Selection will be based on academic excellence combined with demonstrated financial need as determined by Waterloo. To be considered, students must complete the University of Waterloo Entrance Bursary application by April 15. This fund is made possible by a donation from StackAdapt to support the next generation of engineering talent.

*Method of Financing: one-time donation (to fund for one year)*

#### **StackAdapt Entrance Bursary for Women in Engineering**

A bursary, valued at \$5,000, will be provided to a full-time female undergraduate student entering Year One of Computer, Management, Mechatronics, Software or Systems Design Engineering in the Faculty of Engineering wherein women are underrepresented. Selection will be based on academic excellence combined with demonstrated financial need as determined by Waterloo. To be considered, students must complete the University of Waterloo Entrance Bursary application by April 15. This fund is made possible by a donation from StackAdapt to support the next generation of engineering talent and to support women in Engineering.

*Method of Financing: one-time donation (to fund for two years)*

# NEW UNDERGRADUATE SCHOLARSHIPS, AWARDS, and BURSARIES

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- submitted for October 17, 2023 meeting of Senate Undergraduate Council -

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## **Yip Family Women in Engineering Scholarship**

Two scholarships, valued at up to \$25,000 each over eight academic terms, will be awarded annually to female undergraduate students entering Year One of the Faculty of Engineering: one to a student in Computer Engineering and one to a student in Electrical Engineering, wherein women are underrepresented. Recipients will receive \$3,125 per academic term provided a cumulative academic average of 80% is maintained and they are progressing in the program they were admitted to. This fund is made possible by a donation from Jennifer Yip (BASC '12, Computer Engineering) in honour of her late sister, Janet Law-Yip (BASC '07 Electrical Engineering). Both Jennifer and Janet valued the education they received with Waterloo Engineering and this scholarship is provided to inspire women to pursue a degree in engineering and to support them along the way.

*Method of Financing: annual donation (five-year pledge)*

## **AWARDS FOR CURRENT STUDENTS**

### **Jordan Banks Award**

Up to two awards, valued at \$2,500 each, are available annually for full-time undergraduate students enrolled in Year Two, Three, or Four of any program. Selection is based on a combination of academic achievement (minimum 75% cumulative average) and contributions to Jewish culture and community through extracurricular or volunteer activities on campus and/or in other communities. Interested students should submit an application by October 15. This fund is made possible by a donation from the Moses and Temara Tobe Foundation Inc.

*Method of Financing: donation (to provide awards for four-years)*

### **Bird Construction Capstone Design Award**

One award, valued at \$5,000, will be provided to an undergraduate student team enrolled in Year Four of Architectural or Civil Engineering and undertaking a fourth-year Capstone Design project. Selection will be based on proposals that, in the opinion of the selection committee, demonstrate a potential for significant innovation in construction waste management and waste reduction strategies. Interested students are to apply through the Faculty of Engineering's Capstone Design website: <https://uwaterloo.ca/engineering/capstone-design-awards-application-form>. The award funds will be divided equally among the winning team members. This fund is made possible by a donation from Bird Construction.

*Method of Financing: annual donation (two-year pledge)*

### **BDP Quadrangle Excellence in Digital Design and Fabrication Award**

Two awards, valued at \$1,500 each, will be presented annually to full-time undergraduate students enrolled in any year in the School of Architecture. Selection will be based on a strong understanding of digital design tools and the fabrication process demonstrated through storytelling, aesthetic composition, technical skill, and ambition in the field. Students will be invited to apply through the School of Architecture during the Spring term. This fund is made possible by a donation from BDP Quadrangle to celebrate the continued advancement of digital fabrication and emergent ideas for its application and aesthetic advancement.

*Method of Financing: annual donation (five-year pledge)*

# NEW UNDERGRADUATE SCHOLARSHIPS, AWARDS, and BURSARIES

## to be added to the Undergraduate Awards Database

- submitted for October 17, 2023 meeting of Senate Undergraduate Council -

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### **BRP Capstone Design Award**

Two awards, valued at \$10,000 each, will be provided to undergraduate student teams enrolled in Year Four and undertaking a fourth-year Capstone Design Project: one to a student team in Electrical Engineering and one to a student team in Mechanical Engineering. Selection will be based on proposals that, in the opinion of the selection committee, demonstrate an innovative electrical project in the power sports industry, with a preference for projects focused on energy storage systems and power electronic design related to electric propulsion systems. Interested students are to apply through the Faculty of Engineering's Capstone Design website: <https://uwaterloo.ca/engineering/capstone-design-awards-application-form>. The award funds will be divided equally among the winning team members. This fund is made possible by a donation from Bombardier Recreational Products (BRP), a proud University of Waterloo co-op employer.

*Method of Financing: annual donation (two-year pledge)*

### **Cybersecurity and Privacy Institute Undergraduate Award**

Several awards, valued at \$1,000 each, will be presented to full-time undergraduate students enrolled in cybersecurity and/or privacy courses. Selection will be based on overall grade in the course. These awards are made possible by sponsorships to the Cybersecurity and Privacy Institute to address the cybersecurity/privacy talent gap by fostering student enrolment in cybersecurity/privacy courses and encouraging more students to consider a career in this field.

*Method of Financing: CPI operating account*

### **George Dufault Award for Excellence in Communication**

An award, valued at \$1,000, is presented to a graduating student in the Faculty of Engineering who has demonstrated excellence in communication through outstanding performance in the faculty-wide Sanford Fleming Technical Speaker Competition, held in the preceding Spring or Fall term, and by achieving excellence on work term reports throughout their undergraduate career. The recipient will receive this award as well as the George Dufault Medal for Excellence in Communication. This fund is made possible by a donation from Christopher P. and Heather Dufault in memory of George Dufault.

*Method of Financing: annual donation (ongoing commitment)*

### **Dusseault Bursary in Geology**

One or more bursaries, valued at up to \$5,000, are awarded annually to undergraduate students enrolled in Year Two, Three, or Four of any program within the Department of Earth and Environmental Sciences or in Geological Engineering. Eligibility will be based on demonstrated financial need as determined by the University of Waterloo. Candidates must have a minimum cumulative average of 70%. To be considered, students must submit a bursary application by the fall or winter bursary deadline. This fund was established by Maurice B. Dusseault, a professor of engineering geology at the University of Waterloo. Dusseault hopes that this bursary will help students, aspiring to a career in geology or a related field, to achieve their educational goals.

*Method of Financing: endowment*

### **Federation of Chinese Canadian Professionals (FCCP) (Ontario) Education Foundation Scholarship in Computer Science**

One scholarship, valued at \$1,000, is awarded annually to the student enrolled in Year Three or Four of the David R. Cheriton School of Computer Science achieving the highest grade in CS 341 (Algorithms). This award is made possible by a donation from the Federation of Chinese Canadian Professionals (Ont.) Education Foundation.

*Method of Financing: annual donation (five-year pledge)*



## NEW UNDERGRADUATE SCHOLARSHIPS, AWARDS, and BURSARIES

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### **Friendship Gardens Award**

An award, valued at \$2,000, will be provided annually to a full-time undergraduate student enrolled in Year Two of the School of Environment, Resources and Sustainability. Selection is based on academic achievement (minimum 75% cumulative average) combined with leadership and extracurricular involvement in the area of sustainability and ecology. Interested students should submit an application by November 15. This fund is made possible by a donation from Lynn Sinclair Smith and Helen Chen to support students who are committed to contributing to the sustainability of the environment and its resources.

*Method of Financing: annual donation (five-year pledge)*

### **Fuller Landau LLP Accounting Scholarship**

Two scholarships, valued at \$2,500 each, will be awarded annually to full-time undergraduate students enrolled in Year Two of any program in the School of Accounting and Finance. Selection is based on academic excellence (minimum 80% cumulative average) combined with a demonstrated interest in the field of accounting through extracurricular, volunteer, and/or work experiences. Preference will be given to the student who best describes how the impact of this award will help them achieve their educational goals. Interested students should submit an application by October 1. This scholarship is made possible by a donation from the Fuller Giving Foundation. Fuller Landau LLP is a proud Canadian company and University of Waterloo co-op and alumni employer.

*Method of Financing: annual donation (three-year pledge)*

### **Germain – Erdős Undergraduate Award in Mathematics Research**

An award, valued at \$2,500, will be provided annually to a full-time undergraduate student enrolled in Year One, Two, Three, or Four in the Faculty of Mathematics. The goal of this award is to recognize excellence in research in the theoretical aspects of Mathematics such as, but not limited to, research in the areas of combinatorics and optimization, pure mathematics, and theoretical aspects of computer science, applied mathematics, and statistics and actuarial science. Nominations will be solicited from departments by the Associate Dean Research and International, Faculty of Mathematics, and must include a letter of support from their supervisor, a short statement summarizing their research, describing the impact of their work and explaining how the mathematical research experience has impacted their career goals, a CV, and, if applicable, copies of research papers published or co-authored by the student. Supporting documents should be submitted by their supervisor. Interested students and supervisors should submit an application by April 15. This award is made possible by a donation from David Ash (BMath '87) and is named in recognition of two historical mathematicians: Sophie Germain and Paul Erdős. The intent of this award is to bolster confidence of the recipient, and to encourage them to participate further in fundamental research.

*Method of Financing: annual donation (four-year pledge)*

### **GHL Consultants Capstone Design Award**

One award, valued at \$5,000, will be provided to an undergraduate student team enrolled in Year Four of Architectural or Mechanical Engineering and undertaking a fourth-year Capstone Design project. Selection will be based on proposals that, in the opinion of the selection committee, focus on fire engineering or building codes. This includes, but is not limited to building safety, fire safe materials, fire safety related equipment and/or systems (such as detectors and sprinklers), and/or a building design project that involves demonstrating compliance with fire safety provisions in Division B, Part 3 of the National Building Code of Canada. Interested students are to apply through the Faculty of Engineering's Capstone Design website: <https://uwaterloo.ca/engineering/capstone-design-awards-application-form>. The award funds will be divided equally among the winning team members. This fund is made possible by a donation from GHL Consultants Ltd.

*Method of Financing: annual donation (two-year pledge)*

## NEW UNDERGRADUATE SCHOLARSHIPS, AWARDS, and BURSARIES

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### **Heartland Farm Mutual Award in Actuarial Science**

Two awards, valued at \$2,500 each, will be provided annually to full-time undergraduate students enrolled in Year Two and Three of the Actuarial Science program in the Faculty of Mathematics. Selection is based on academic achievement (minimum 80% cumulative average) and a demonstrated interest in Actuarial Science both inside and outside of the classroom. Preference will be given to the student who can best describe the impact this award will have on their ability to pursue their educational goals. Interested students should submit an application by June 15. This fund is made possible by a donation from Heartland Farm Mutual to encourage the next generation of actuaries.

*Method of Financing: annual donation (three-year pledge)*

### **Stephen Huss Memorial Scholarship**

A scholarship, valued at up to \$1,500, will be awarded annually to a full-time undergraduate student enrolled in Year Four in the Department of Psychology in the Faculty of Arts. Selection will be based on academic excellence (minimum 80% average) and extracurricular involvement in the area of mental health. Interested students should submit an application by February 15. This fund is made possible by a donation from the Huss family, in loving memory of Stephen Huss, who struggled with mental illness. Despite these challenges, Stephen courageously lived life to the fullest, inspiring listeners the world over with his music and visual creations.

*Method of Financing: endowment (amended from trust to endowment)*

### **Don Irish Memorial Scholarship**

A scholarship, valued at base tuition for one academic term, will be awarded annually to a full-time undergraduate student entering Year Two of the Honours Chemistry or Honours Computational Chemistry program in the Department of Chemistry. Selection is based on academic excellence (minimum 80% cumulative average). This fund is made possible by a donation from Peter and Karin Tremaine, to honour the memory of Professor Don Irish.

*Method of Financing: annual donation (five-year pledge)*

### **Dr. PL Kannappan Memorial Scholarship in Pure Mathematics**

A scholarship, valued at \$1,000, will be awarded annually to a full-time undergraduate student enrolled in Year Two, Three, or Four of any program in the Department of Pure Mathematics in the Faculty of Mathematics. Selection is based on academic excellence (minimum 80% cumulative average). This fund is made possible by the Kannappan family in memory and celebration of Dr. PL Kannappan. He is remembered by family, friends, colleagues, and students as a lifelong teacher, traveler, and researcher, who strongly believed in the power of education.

*Method of Financing: annual donation (ten-year pledge)*

### **Lafarge Eastern Canada Leaders of Tomorrow Award**

Two awards, valued at \$4,000 each, will be provided annually to women students enrolled in Year, Two, Three, or Four of Chemical, Civil, or Geological Engineering in the Faculty of Engineering, or Earth Sciences in the Faculty of Science, wherein women are underrepresented. Candidates must have a minimum cumulative average of 75%. Selection is based on a career interest in innovative and sustainable green building solutions as demonstrated through course work, co-op work experiences and/or extracurricular activities. An application is required by October 15. This fund is made possible by a donation from Lafarge Eastern Canada Inc., who are passionate about helping women succeed and grow their interest in innovative and sustainable green building solutions.

*Method of Financing: annual donation (five-year pledge)*

## NEW UNDERGRADUATE SCHOLARSHIPS, AWARDS, and BURSARIES

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#### **Raymond L. Legge Engineering Pride Award**

An award, valued at up to \$1,200, will be provided annually to an undergraduate student enrolled in Year Two, Three, or Four of any program in the Faculty of Engineering, with preference to Chemical Engineering. Selection will be based on academic achievement (minimum 70% cumulative average) and positive contributions to the 2SLGBTQ+ community demonstrated through extracurricular involvement and/or volunteer activities. Interested students should submit an application by October 1. This award was established in memory of Distinguished Professor Emeritus Raymond L. Legge for his significant contributions to the University of Waterloo and Chemical Engineering community. The award is aimed at helping exceptional engineering undergraduates who contribute to the 2SLGBTQ+ community.

*Method of Financing: endowment*

#### **Norm Li Visualization Award**

Multiple awards will be presented annually to full-time undergraduate students in the School of Architecture who are enrolled in an advanced visualization course. Selection will be based on a strong understanding and passion for design, as evidenced by architectural visualizations completed in any elective or core advanced visualization course (e.g., ARCH 313), demonstrating outstanding storytelling, artistic composition, and technical skill in the field. This fund is made possible by a donation from Norm Li.

*Method of Financing: renewal of annual donation (five-year pledge)*

#### **Bev Marshman Scholarship in Applied Math and Computing**

A scholarship, valued at up to \$1,200, will be provided annually to a full-time woman-identifying undergraduate student enrolled in Year Two, Three, or Four of the Applied Mathematics or Computer Science programs in the Faculty of Mathematics wherein women are underrepresented. Selection is based on academic excellence (minimum 80% cumulative average) combined with extracurricular involvement and participation in volunteer activities. Preference will be given to students from outside the province of Ontario. Interested students should submit an application by October 15. This fund is made possible by a donation from M. Lisa Yeo (BMath '93) and W. Jonathan Baldwin (BMath '93) to encourage and assist students who are interested in the pursuit of technological innovation and committed to achieving the very highest standards of excellence. The award is named in honour of Bev Marshman, a well respected professor in the Department of Applied Mathematics at the University of Waterloo for many years.

*Method of Financing: amended from an annual fund to an endowment*

#### **Pella Awards**

Several awards will be presented annually to full-time undergraduate students in Year Two, Three, or Four and/or master's students in the School of Architecture. Selection is based on submission and review of a project that demonstrates excellence in sustainable design, and that exemplifies careful consideration of materials, details, placement, and orientation of fenestration. First place will be awarded \$3,000, second place \$2,000, and third place \$1,000. Interested students may apply by submitting their project to the Director of the School of Architecture by May 1. This fund is made possible by a donation from Pella to support student success and innovation in fenestration.

*Method of Financing: renewal of annual donation (three-year pledge)*

#### **RSM and Roopra Family Scholarship**

A scholarship, valued at up to \$1,200, will be awarded annually to a full-time woman undergraduate student enrolled in Year Three or Four of any program in the School of Accounting and Finance in the Faculties of Arts, Mathematics, Science, or Environment. Selection is based on academic excellence (minimum 80% cumulative average), combined with extracurricular involvement and/or participation in leadership activities. Interested students should submit an application by October 1. This fund is made possible by a donation from the Roopra family and the RSM US Foundation.

*Method of Financing: endowment*



## NEW UNDERGRADUATE SCHOLARSHIPS, AWARDS, and BURSARIES

### to be added to the Undergraduate Awards Database

- submitted for October 17, 2023 meeting of Senate Undergraduate Council -

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#### **Shah Family Engineering Bursary**

Several bursaries, valued at up to \$5,000 each, will be provided annually to full-time undergraduate students enrolled in Year Two, Three, or Four of any program in the Faculty of Engineering. Selection is based on academic excellence (minimum 80% cumulative average) and demonstrated financial need. To be considered, students must complete the University of Waterloo bursary application by the fall or winter bursary deadline. This fund is made possible by Kris Shah (BAsc '86, Electrical Engineering) to remove financial barriers and invest in the future generation of engineering talent.

*Method of Financing: annual donation (five-year pledge)*

#### **Jean and Raymond Yu First Generation Award**

An award, valued at \$2,000, will be provided annually to a full-time undergraduate student enrolled in Year Two, Three, or Four of any program in the Faculty of Arts or the Faculty of Health. Selection is based on academic achievement (minimum 75% cumulative average) and an essay describing the impact this award will have on the student's ability to pursue their educational goals. Preference will be given to students who are part of the first generation in their family to attend post-secondary education. Interested students should submit an application by November 1. This fund is made possible by a donation from Amanda Yu (MA '00), in honour of her parents Jean and Raymond Yu.

*Method of Financing: annual donation (five-year pledge)*

#### **Waterloo Architecture Student Award in Community Studies**

An award, valued at \$1,000, will be provided annually to a full time undergraduate or graduate student enrolled in any year in the School of Architecture. Selection is based on research or a project that profiles, researches, explores, and/or works to develop solutions for a not-for-profit organization and/or charity located in the City of Cambridge. In the application, students should clearly identify at least one local not for-profit or charitable organization that either directly or indirectly ties into their research. Interested students must submit an application that can be found on the School of Architecture website, by the advertised deadline. This fund is made possible by donations from corporate partners, alumni and friends located in, or with strong connections to, the City of Cambridge.

*Method of Financing: departmental funds (five-year pledge)*

#### **Adam Weiss Community Leadership Award**

Two awards, valued at up to \$6,000 each, will be awarded annually to full-time undergraduate students enrolled in Year Two, Three, or Four of select programs in the Faculties of Engineering, Science, or Mathematics. Eligible programs include Electrical, Mechanical, Mechatronics, Nanotechnology, Software, and Systems Design Engineering, as well as Physics and Mathematical Physics. Selection is based on academic excellence (minimum 70% cumulative average) combined with leadership involvement related to extracurricular and/or volunteer activities in their community. Preference will be given to students with demonstrated interest in entrepreneurship. Interested students should submit an application by October 1. This fund was made possible by the generous support of the Weiss family to honour Dr. Adam Weiss, who was an entrepreneur and founder of Wise Device Incorporated (WDI).

*Method of Financing: endowment*

### **STUDENT-ATHLETE AWARDS**

#### **80s Athena Alumnae Volleyball Award**

One or more awards, valued at up to \$2,500, will be given to members of the varsity women's volleyball team. Preference will go to upper-year student-athletes viewed by their coaches as leaders and role models to their teammates. These awards recognize strong athletic talent, determination, integrity, contribution, and dedication to Athletics and Recreation, their respective team and community. This fund is supported by Warrior Women's Volleyball alumnae Corinne Williams (BES '89), Tracy Shields Williams (BA '91), Tara Casagrande (BA '90), Anne Sinai (BES '87), Julija Hunter (BA '92) and Ann Hovey (BAsc '87, MMath '89).

*Method of Financing: annual donation plus matching funds (five-year pledge)*

## NEW UNDERGRADUATE SCHOLARSHIPS, AWARDS, and BURSARIES

to be added to the Undergraduate Awards Database

- submitted for October 17, 2023 meeting of Senate Undergraduate Council -

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### **Robin Banks Football Athletic Excellence Award**

One or more awards, valued at up to \$4,000 will be given to members of the varsity football team. These awards recognize athletic talent and contribution to Warrior Athletics and Recreation, their team and community. This fund is made possible by a donation from Peter and Jennifer Banks in memory of Peter's late father, Professor Robin Banks. Professor Banks was a long-serving Dean of Arts and senior leader for the University of Waterloo, as well as an active supporter of Warrior Football.

*Method of Financing: renewal of annual donation plus matching funds (five-year pledge)*

### **Banks Family Women's Basketball Excellence Award**

One or more awards, valued at up to \$2,000, will be given to members of the varsity women's basketball team. These awards recognize athletic talent and contribution to Warrior Athletics and Recreation, their team and community. This fund is made possible by a donation from Peter and Jennifer Banks.

*Method of Financing: annual donation plus matching funds (five-year pledge)*

### **John L. Bertoia Football Excellence Award**

One or more awards, valued at up to \$5,000, are given to student-athletes on the varsity football team. This award recognizes leadership, athletic talent, and contribution to the Department of Athletics and Recreation, Warriors Football, and their community. This fund is made possible by a donation from Kevin Bertoia, brother of Warriors Football Head Coach Chris Bertoia, in memory of their father.

*Method of Financing: renewal of annual donation plus matching funds (two-year pledge)*

### **Patricia Bertoia Excellence Award**

One or more awards, valued at up to \$5,000, will be given to a student-athlete on the varsity football team. This award recognizes leadership, athletic talent and contribution to Warriors Athletics and Recreation, their team, the school and their community. This fund is supported by Chris Bertoia, in honour of his mother, who passed away in April 2023.

*Method of Financing: renewal of annual donation plus matching funds (three-year pledge)*

### **C3 Group Carl Totzke Athletic Excellence Award**

Four awards valued at \$5,000 each will be given to student-athletes on the varsity football team. These awards recognize leadership, athletic talent and contribution to Warriors Athletics and Recreation, their team, the school and their community. This fund is supported by Cameron W. Wood (BASc '63, Civil Engineering) and Murray C. Gamble (BASc '85, Civil Engineering) through their company, The C3 Group, and in memory of Carl Totzke, the founding director of Athletics and Recreation at the University of Waterloo.

*Method of Financing: renewal of annual donation plus matching funds (five-year pledge)*

### **Environment Student-Athlete Award**

An award, valued at \$1,500, will be provided annually to a full-time undergraduate or graduate student whose primary academic plan is in the Faculty of Environment and who is a member of a Warrior varsity team. Selection is based on academic excellence, demonstrated interest in environment and sustainability leadership, as well as athletic talent and contribution to Warrior Athletics. To be considered, first-year students must have a minimum admission average of 80% while returning students must have a minimum cumulative average of 75%. Interested students should submit an application by November 1. This fund is made possible by donations from Faculty of Environment community members, including alumni and former Environment student-athletes, and lead alumni donor champion, Derek Coleman (Ages Foundation), PhD '74.

*Method of Financing: endowment*

## **NEW UNDERGRADUATE SCHOLARSHIPS, AWARDS, and BURSARIES**

### **to be added to the Undergraduate Awards Database**

**- submitted for October 17, 2023 meeting of Senate Undergraduate Council -**

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#### **Glenn Hauer Rugby Excellence Award**

Two awards valued at \$5,000 each will be provided annually to undergraduate student-athletes: one to a member of the varsity men's rugby team and one to a member of the varsity women's rugby team. Preference will be given to students enrolled in the Faculty of Engineering. Preference will also be given to students who have made a positive impact on their team, the Athletics and Recreation program, and/or the University community. This fund is made possible by a donation from Glenn Hauer (BASc '85, Civil Engineering and MASc '88, Civil Engineering).

*Method of Financing: annual donation (five-year pledge)*

#### **Ho Student-Athlete Services & Intercollegiate Excellence Award**

One award valued at \$2,000 or two awards valued at \$1,000 will be given to student-athletes who have made significant contributions to Warrior Athletics and Recreation in the past 12 months in an administrative or volunteer capacity. Preference will be given to varsity athletes who are members of the women's ice hockey team, the women's basketball team, or the field hockey team. This award recognizes athletic talent and contribution to Warrior Athletics & Recreation, their team and the school. This fund is supported by University of Waterloo alum and part-time Warriors public address announcer, In-Ting Ho.

*Method of Financing: renewal of annual donation plus matching funds (five-year pledge)*

#### **George Hunsberger Football Athletic Excellence Award**

One or more awards valued at up to \$4,000 will be given to members of the varsity football team. These awards recognize athletic talent and contribution to Warrior Athletics and Recreation, their team and community. This fund is made possible by a donation from Peter and Jennifer Banks in memory of George Hunsberger, former Waterloo Warrior football player and women's basketball assistant coach, outstanding basketball and football coach at Bluevale Collegiate in Waterloo, Ontario, and mentor to many student-athletes and coaches throughout Ontario.

*Method of Financing: renewal of annual donation plus matching funds (five-year pledge)*

#### **Callie Reagan Women's Hockey Award**

One award valued at \$2,000 or two awards valued at \$1,000 will be given to student-athletes on the varsity women's ice hockey team. This award recognizes leadership, athletic talent and contribution to Warriors Athletics and Recreation, their team, the school and their community. This fund is supported by Shaun and Jenny Reagan, in honour of their daughter Callie.

*Method of Financing: renewal of annual donation plus matching funds (five-year pledge)*

#### **Thomas Family Athletic Excellence Award**

One award, valued at \$1,000 or more, is given to a student-athlete enrolled in any program in the School of Accounting and Finance in the Faculties of Arts, Environment, Mathematics, or Science. Preference will be given to members of the varsity football team and to students enrolled in Year One. This award recognizes athletic talent, leadership qualities, and contribution to Warriors Athletics and Recreation, their team, the school, and their community. This fund is supported by School of Accounting and Finance and Warriors football alumnus, Benjie Thomas.

*Method of Financing: endowment*

**OFFICE OF THE REGISTRAR REPORT TO  
SENATE UNDERGRADUATE COUNCIL and  
SENATE GRADUATE & RESEARCH COUNCIL  
October 2023**

**1. REGULATIONS**

**1.1 Academic Calendar Dates for 2024-2025**

**1.2 Guidelines for Determining Academic Calendar of Dates**

**Symbols and abbreviations:**

(M) Monday, (T) Tuesday, (W) Wednesday, (R) Thursday, (F) Friday, (S) Saturday, (U) Sunday, N/A – Not Applicable

	<b>Fall 2024</b>	<b>Winter 2025</b>	<b>Spring 2025</b>
Co-operative Work Term Begins	Sept. 3 (T)	Jan. 6 (M)	May 5 (M)
Classes Begin	Sept. 4 (W)	Jan. 6 (M)	May 5 (M)
Holidays	Oct. 14 (M)	Feb. 17 (M) Apr. 18 (F)	May 19 (M) June 30 (M) July 1 (T) Aug. 4 (M)
Reading Week	Oct. 12-20 (S-U)	Feb. 15-23 (S-U)	N/A
Convocation	Oct. 25, 26 (F,S)	N/A	June 10-14 (T-S)
Classes End	Dec. 3 (T)	Apr. 4 (F)	July 30 (W)
Make-up Day(s) for in-term holidays	N/A	N/A	July 2 (W) for May 19 (M schedule) July 28 (M) for June 30 (M schedule) July 29 (T) for July 1 (T schedule) July 30 (W) for July 2 (W schedule)
Pre-Examination Study Day(s)	Dec. 4, 5 (W, R)	Apr. 7, 8 (M,T)	July 31, Aug. 1 (R, F)
Examinations Begin	Dec. 6 (F)	Apr. 9 (W)	Aug. 5 (T)
In-Person Exam Days for Online Courses	Dec. 6, 7 (F,S) Dec. 11, 14 (W,S)	Apr. 11, 12 (F,S) Apr. 16, 17 (W,R)	Aug. 8, 9 (F,S) Aug. 13, 16 (W,S)
Examinations on Sunday	Dec. 8 (U)	N/A	N/A
No Exams on the Following Days	Dec. 15 (U)	April 13 (U)	Aug. 2 (S) Aug. 3 (U)

		Apr. 18 (F) Apr. 19 (S) Apr. 20 (U)	Aug. 4 (M) Aug. 10 (U) Aug. 17 (U)
Examinations End (including Emergency Day)	Dec. 20 (F)	Apr. 26 (S)	Aug. 18 (M)
Co-operative Work Term Ends	Dec. 20 (F)	Apr. 25 (F)	Aug. 22 (F)
Teaching days	60	60	60
Pre-examination Study Day(s)	2	2	2
Examination days	13 (+1 Emergency Day)	13 (+1 Emergency Day)	11 (+1 Emergency Day)

## Guidelines for Determining Academic Calendar of Dates

The following are principles and guidelines either formally agreed upon by Senate or adopted as common practice in determining the dates for the academic year.

1. That the practice of setting dates for each academic year continues to be an annual exercise.
2. That there be no fewer than 60 teaching days (12 weeks) in a term. A clear rationale for fewer than 60 teaching days must be communicated to Senate at the time calendar dates are approved. In calculating teaching days in a term, Saturdays, Sundays, and statutory or University holidays are excluded.
3. That attention be given to balancing the number of meets in courses. Where an imbalance may occur because of statutory holidays, the class schedule for a day different than the calendar day can be used to balance the number of course meets.
4. That Fall Convocation be the Friday and Saturday that fall in the third full week (beginning Sunday) of October.
5. That Spring Convocation be the Tuesday to Saturday in the second full week (beginning Sunday) in June.
6. That the Reading Weeks occur in all Faculties in the fall and winter terms. They must begin on the Saturday before the public holidays of Thanksgiving Day and Family Day and will end on the following Sunday.
7. That Fall Term classes in September begin on the Wednesday following the Labour Day holiday.  
**Exception:** The Fall Term begins on Tuesday, September 8<sup>th</sup> when Labour Day is September 7<sup>th</sup>.
8. That the start date for Winter Term be set as follows:
  - If January 1<sup>st</sup> is a Sunday, then start of classes is ~~Wednesday, January 4<sup>th</sup>~~ **Monday, January 9<sup>th</sup>**.
  - If January 1<sup>st</sup> is a Monday, then start of classes is ~~Wednesday, January 3<sup>rd</sup>~~ **Monday, January 8<sup>th</sup>**.
  - If January 1<sup>st</sup> is a Tuesday, then start of classes is Monday, January 7<sup>th</sup>.
  - If January 1<sup>st</sup> is a Wednesday, then start of classes is Monday, January 6<sup>th</sup>.
  - If January 1<sup>st</sup> is a Thursday, then start of classes is Monday, January 5<sup>th</sup>.
  - If January 1<sup>st</sup> is a Friday, then start of classes is ~~Tuesday, January 5<sup>th</sup>~~ **Monday, January 11<sup>th</sup>**.
  - If January 1<sup>st</sup> is a Saturday, then start of classes is ~~Wednesday, January 5<sup>th</sup>~~ **Monday, January 10<sup>th</sup>**.
9. The start date for Spring Term be set as follows:
  - If May 1<sup>st</sup> is a Sunday, then start of classes is Monday, May 2<sup>nd</sup> **9<sup>th</sup>**.
  - If May 1<sup>st</sup> is a Monday, then start of classes is Monday, May 1<sup>st</sup> **8<sup>th</sup>**.
  - If May 1<sup>st</sup> is a Tuesday, then start of classes is ~~Tuesday, May 1<sup>st</sup>~~ **Monday, May 7<sup>th</sup>**.
  - If May 1<sup>st</sup> is a Wednesday, then start of classes is ~~Wednesday, May 1<sup>st</sup>~~ **Monday, May 6<sup>th</sup>**.
  - If May 1<sup>st</sup> is a Thursday, then start of classes is Monday, May 5<sup>th</sup>.
  - If May 1<sup>st</sup> is a Friday, then start of classes is Monday, May 4<sup>th</sup> **11<sup>th</sup>**.
  - If May 1<sup>st</sup> is a Saturday, then start of classes is Monday, May 3<sup>rd</sup> **3**.

10. That there be no fewer than one pre-examination study day and when possible, two pre-examination study days (excluding Saturday, Sunday, and holidays) between the end of classes and the beginning of examinations. A clear rationale for using fewer than 2 days or Saturday, Sunday, and holidays as pre-examination study days, must be communicated to Senate at the time calendar dates are approved.
11. That there be no fewer than 13 examination days in the Fall and Winter Terms, and 11 examination days in the Spring Term. In addition, one Emergency Day with no scheduled examinations is added to the end of the examination period.
12. In calculating examination days, Saturdays which fall within the period are included, whereas Sundays and statutory or University holidays are excluded.  
**Exceptions:**  
Examinations will not be scheduled on the Saturday following Good Friday when that day falls within the examination schedule or the Saturday of the Civic Day weekend.  
The first Sunday within the examination period may be used when required to accommodate the prescribed number of examination days in the Fall Term.
13. That in the Fall Term no examinations be scheduled beyond December 22<sup>nd</sup>. The Emergency Day cannot be scheduled beyond December 23<sup>rd</sup>.
14. That Online Course Examination Days in each term be the first consecutive Friday and Saturday **and the second consecutive Wednesday and Saturday** in the examination period.
15. Grades due dates for on campus courses **that have a scheduled final examination** are normally scheduled seven days from the date of the final examination. Grades for **Online (Centre for Extended Learning)** courses that have a scheduled final examination are due on the last day of the grades submission period. Grades for all courses without a scheduled final examination are normally due 14 days after the start of examinations.
16. Co-op work terms are expected to be 16 week in duration. Actual start and end dates may vary depending on employer or student requirements in consultation with Co-operative Education.

Prepared by:  
C. Newell Kelly, Registrar  
October 2023

## **Rules that Require Exceptions with Rationale:**

### **Rule 12**

*... The first Sunday within the examination period may be used when required to accommodate the prescribed number of examination days in the Fall Term.*

With fall term classes beginning September 3, 2024, and the scheduling of two study days prior to the fall final exam period, the first Sunday within the exam period was required for scheduling exams to accommodate the prescribed number of examination days.

### **Rule 12 and Rule 14**

*... Examinations will not be scheduled on the Saturday following Good Friday when that day falls within the examination schedule or the Saturday of the Civic Day weekend.*

*That Online Course Examination Days in each term be the first consecutive Friday and Saturday **and the second consecutive Wednesday and Saturday** in the examination period.*

With Good Friday falling on April 18, 2025, the second consecutive Saturday is moved to Thursday, April 17, 2025.