SENATE EXECUTIVE COMMITTEE
Monday 15 January 2024
3:30 p.m. – 4:30 p.m. EST
Zoom Videoconference

TIMING	AGENDA ITEM	PAGE	ACTION
3:30 p.m.	**OPEN SESSION** 1. Minutes of 13 November 2023 and Business Arising To approve the minutes as distributed/amended.	3	Decision
	2. Approval of Membership to Senate Committees and Councils To recommend that Senate elect Joel Dubin to the Senate Long Range Planning Committee as the member from the Board of Directors of the Faculty Association of the University of Waterloo, term to 30 April 2024.	5	Decision
3:35 p.m. (20 min)	3. Draft 29 January 2024 Senate Agenda To approve the 29 January 2024 Senate agenda, as presented/amended.	7	Decision
3:55 p.m.	4. Other Business 5. Next Meeting: Tuesday 20 February 2024 from 3:30 – 4:30 p.m.		Input

8 January 2024

Mike Grivicic
Associate University Secretary

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University of Waterloo
SENATE EXECUTIVE COMMITTEE
Minutes of the 13 November 2023 Meeting
[in agenda order]

Present: Jeff Casello, Joan Coutu, Laura Deakin, Catherine Dong, Vivek Goel (chair), Mike Grivicic (secretary), Christiane Lemieux, Carol Ann MacGregor, Rory Norris, David Porreca, Luke Potwarka, Mary Robinson, James Rush, Sharon Tucker, Clarence Woudsma

Absent: Jack deGooyer

Guests: Jenny Flagler-George, Genevieve Gauthier-Chalifour, Diana Gonçalves, Andrea Kelman

The chair noted that one new report was distributed to the committee earlier in the day; consideration of this report will occur as part of item 2.

1. MINUTES OF THE 10 OCTOBER 2023 MEETING AND BUSINESS ARISING
A motion was heard to approve the minutes as distributed. Porreca and Deakin. Carried. There was no business arising.

2. DRAFT 27 NOVEMBER 2023 SENATE AGENDA
Members considered the report distributed separately from the agenda. A motion was heard to recommend that Senate elect Nicholas Pellegrino as a member of Senate Graduate & Research Council, term to 30 April 2025. Porreca and Deakin. Carried.

Members reviewed the draft Senate agenda and highlighted items requiring minor amendment before proceeding to November Senate:
- Minor amendments to clarify the class component definitions
- Revise appendices in the joint SGRC/SUC report for class component definitions to more clearly delineate the revised definitions and the amendment to the calendars
- Amend the covering report pertaining to the Faculty of Science constitution to clarify that the Faculty's decanal nominating committee guidelines are not currently in line with Policy 45, and that the Faculty would seek Senate approval to increase the faculty membership on the decanal search committee to seven total members (until such time as the policy is so amended)

A motion was heard to approve the 27 November 2023 Senate agenda as amended. Deakin and Casello. Carried.

3. OTHER BUSINESS
There was no other business.

1 December 2023   Mike Grivicic
                                                   Associate University Secretary

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For Approval   **Open Session**

To:	**Senate Executive Committee**

Sponsor:	Secretariat
Contact Information:	senate@uwaterloo.ca

Date of Meeting:	**January 15, 2024**

Agenda Item Identification:	**2. Approval of Membership to Senate Committees and Councils**

Recommendation/Motion:

To recommend that Senate elect Joel Dubin to the Senate Long Range Planning Committee as the member from the Board of Directors of the Faculty Association of the University of Waterloo, term to 30 April 2024.

Summary:

The Faculty Association of the University of Waterloo has nominated Joel Dubin to fill the vacancy on this committee, for the remainder of the 2023-24 academic year. The terms of reference for the committee indicate that this member is elected by Senate; at the Senate meeting further nominations will be accepted from the floor and should there is more than one name for the position, an electronic election will follow the meeting.

Jurisdictional Information:

As provided for in Senate Bylaw 2, section 1.04, Senate Executive Council is empowered:

> e. To present to Senate, normally at the last regular meeting in the academic year in April, a list of nominations for the committees and councils of Senate.

Governance Path:

Senate Executive Committee (mm/dd/yy): 01/05/24

Senate approval date (mm/dd/yy): 01/29/24

Senate   **1**

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SENATE
MONDAY 29 January 2024
3:30 P.M. EST
NH 3407 / Zoom
[Governing Documents and Resources](#)

TIMING	AGENDA ITEM	PAGE	ACTION
	OPEN SESSION		
3:30 p.m.	1. Territorial Acknowledgement (Mark Giesbrecht, Dean of Mathematics)	Oral	
	2. Conflict of Interest	Oral	Declaration
	3. Approval of the Agenda, and Approval of the Consent Agenda To approve the agenda as presented/amended, and to approve or receive for information the items on the consent agenda, listed as items 15-19 of the Senate agenda.	Oral	Decision
	4. [Minutes of the 27 November 2023 Meeting](#) To approve the minutes of the 27 November 2023 meeting as distributed/amended.	11	Decision
	5. Business Arising from the Minutes	Oral	Input
	6. [Senate Work Plan](#)	15	Information
3:40 p.m. (15 mins)	7. Report of the President a. President's Update	Oral	Information
3:55 p.m. (15 mins)	8. [2023 Annual Report, Office of the Vice-President, Research and International](#)	17	Discussion
4:10 p.m. (15 mins)	9. Faculty Update Presentation – Environment (Bruce Frayne)	Oral	Information
4:25 p.m. (5 mins)	10. [Approval of Membership to Senate Committees and Councils](#) To elect Joel Dubin to the Senate Long Range Planning Committee as the member from the Board of Directors of the Faculty Association of the University of Waterloo, term to 30 April 2024.	33	Decision

4:30 p.m.
(5 mins)
	11. Report – Senate Graduate & Research Council
	   a. [Dissolution of the Survey Research Centre (SRC)](#)
	      To approve the dissolution of the Survey Research Centre (SRC), as presented)
		35	Decision

TIMING	AGENDA ITEM	PAGE	ACTION
4:35 p.m. (10 mins)	12. Reports – Senate Undergraduate Council		
	a. Major Modifications – Computer Engineering and Electrical Engineering To approve the creation of the Quantum Engineering Specialization in (1) the Computer Engineering plan and in (2) the in the Electrical Engineering plan, effective 1 September 2024, as presented.	37	Decision
	b. Major Modifications – Nanotechnology Engineering To approve the creation of a Nanoelectronics Specialization, Nanobiosystems Specialization, Nanofabrication Specialization, and Nanomaterials Specialization within the Nanotechnology Engineering plan, effective 1 September 2024, as presented.	41	Decision
	c. Major Modifications – Planning Honours To approve the following major modifications in Planning Honours: the creation of the Social Planning and Community Development Specialization for Plannings Honours; revisions to the Environmental Planning and Management Specialization, the Land Development Planning Specialization, and the Urban Design Specialization; and the inactivation of the Decision Support and Geographical Information Systems Specialization, effective 1 September 2024, as presented.	45	Decision
	d. Inactivation – Global Experience Certificate To approve the inactivation of the Global Experience Certificate, effective 1 September 2024, as presented.	53	Decision
4:45 p.m. (5 mins)	13. Report of the Vice-President, Academic and Provost		
	a. Revisions to Institutional Quality Assurance Process (IQAP) To approve the revisions to the Institutional Quality Assurance Process (IQAP), as presented.	57	Decision
	b. Briefing Note - Undergraduate and Graduate Admissions Data [NB: report under development, to bring forward for Senate agenda]		Information
	c. Report – University Committee on Student Appeals Annual Report (Policy 72)	93	Information
4:50 p.m. (20 mins)	14. Amendments to University Policies		
	a. Recommended Amendments to Policy 3 – Sabbatical and Other leaves for Faculty Members and to Policy 43 – Special Conditions for Employment for Deans To approve the proposed amendments to Policy 3 – Sabbatical and Other Leaves for Faculty Members and to Policy 43 – Special Conditions for Employment for Deans, as described in this report and attachment; And further to recommend that the Board of Governors give final approval to the same proposed amendments.	97	Decision

TIMING	AGENDA ITEM	PAGE	ACTION
	b. Recommended Amendments to Policy 76, Faculty Appointments, and to Policy 77, Tenure and Promotion of Faculty Members [NB: report under development, to bring forward for Senate agenda]		Decision
5:10 p.m. (5 mins)	**Consent Agenda** *Motion: To approve or receive for information the items on the consent agenda, listed as items 15-19 of the Senate agenda*		
	15. Report – Senate Graduate & Research Council	105	Information
	16. Report – Senate Undergraduate Council	107	Information
	a. Regulation Revisions - Academic Considerations and Accommodations To approve the proposed academic regulation revisions for the "University Policies, Guidelines and Academic Regulations, Assignments, Tests, and Final Exams, Accommodations" section of the Undergraduate Studies Academic Calendar, effective for the 2024-2025 Calendar, as presented.	109	Decision
	b. Regulation Revisions – Invalid Credential Combinations To approve the proposed academic regulation revisions to the Invalid Credential Combinations section of the Undergraduate Studies Academic Calendar for (i) the Diploma of Excellence in Geographic Information Systems, and (ii) the Diploma in Sustainability, and Sustainability and Financial Management, Honours, as presented and effective 1 September 2024.	121	Decision
	c. Regulation Revision - Faculty of Environment, Overview of Co-op Plan Requirements To approve the proposed academic regulation revisions for the "Overview of Co-op Plan Requirements" of the Faculty of Environment, as presented and effective 1 September 2024.	123	Decision
	d. Regulation Revision - Faculty of Environment, Repeat Course Rule To approve the proposed academic regulation revisions for the Faculty of Environment's Repeat Course Rule, effective 1 September 2024, as presented.	125	Decision
	17. Report – Senate Long Range Planning Committee	127	Information
	18. Report - Vice-President, Research & International - Awards, Distinctions, Grants, Waterloo International Engagements	129	Information
	19. Report of the Provost – Faculty Appointments, Leaves	137	Information
	20. Other Business	Oral	Input
5:15p.m.	**CONFIDENTIAL** Senators, Vice-Presidents, Secretariat and Technical Staff as required		

TIMING	AGENDA ITEM	PAGE	ACTION
	21. Minutes of the 27 November 2023 Meeting To approve the minutes of the 27 November 2023 meeting as distributed/amended.	139	Decision
	22. Business Arising from the Minutes	Oral	Input
	23. Report of the President	Oral	Information

5:20p.m.
(5 mins)
	24. Reports of the Honorary Degrees Committee
	   a. Distinguished Professor Emeritus/a Candidates
	   b. Honorary Member of the University Candidates
		
		141
		149
			
			Decision
			Decision

5:25p.m. (5 mins)	25. Report to Senate from the Dean of Health Nominating Committee NB: report to be distributed separately, directly to Senators ahead of the meeting		Decision
	26. Other Business		
	27. Adjournment	Oral	Input

22 January 2024

Mike Grivicic
Associate University Secretary to Senate

Important Dates

6 February 2024	Board of Governors Meeting
4 March 2024	Senate Meeting
8 April 2024	Senate Meeting

University of Waterloo
SENATE
Minutes of the Monday 27 November 2023 Meeting
[in agenda order]

Present: John Abraham, Nasser Abukhdeir, Sheila Ager, Marc Aucoin, Lisa Aultman-Hall, Aubrey Basdeo, Jean Becker, Jeff Casello, Judy Castaneda, Trevor Charles, Joan Coutu, Kim Cuddington, Laura Deakin, Charmaine Dean, Catherine Dong, Aiman Fatima, Mark Ferro, Paul Fieguth, Wendy Fletcher, Bruce Frayne, Murray Gamble, Genevieve Gauthier-Chalifour (Secretary), Mark Giesbrecht, Vivek Goel (Chair), Rob Gorbet, Kelly Grindrod, Mike Grivicic (Associate Secretary), Vikas Gupta, David Ha, Peter Hall, Kevin Hare, Neela Hassan, Chris Houser, Natalie Hutchings, Nadine Ibrahim, Narveen Jandu, Martin Karsten, Acey Kaspar, Veronica Kitchen, Scott Kline, Alysia Kolentsis, Christiane Lemieux, Lili Liu, Brad Lushman, Shana MacDonald, Ellen MacEachen, Blake Madill, Colleen Maxwell, Peter Meehan, Kristiina Montero, Cathy Newell Kelly, Rory Norris, James Nugent, Troy Osborne, David Porreca, Luke Potwarka, Cynthia Richard, Mary Robinson, James Rush, John Saabas, Labibah Salim J Ali, Rida Sayed, Asher Scaini, Marcus Shantz, Siva Sivoththaman, James Skidmore, Christopher Taylor, Sharon Tucker, Graeme Turner, Diana Vangelisti, Dan Weber, Stanley Woo, Clarence Woudsma

Guests: Aldo Caputo, Nenone Donaldson, Bernard Duncker, Donna Ellis, Jenny Flagler-George, Barbara Forrest, Sarah Hadley, Andrea Hagedorn, Julie Joza, Andrea Kelman, Jennifer Kieffer, Nick Manning, Christine McWebb, Norah McRae, Ian Milligan, Fayaz Noormohamed, Nicholas Pfeifle, Chris Read, Karl Schuett, Daniela Seskar-Hencic, Brandon Sweet, Sarah Willey-Thomas, Tim Weber-Kraljevski, Katy Wong-Francq

Absent: Dominic Barton*, Jack DeGooyer, Kristine Dalton, David DeVidi*, Sonia Ismail, Achim Kempf, Xianguo Li, Jennifer Lynes Murray, Stephanie Maaz, Carol Ann MacGregor, Ceileigh McAllister, Richard Myers, Christopher Nielsen*, Erin O'Connell*, Beth Sandore Namachchivaya, Jacinda Reitsma*, Sivabal Sivaloganathan, Mary Wells*, Changbao Wu, Annie Yang
*regrets

OPEN SESSION

1. **TERRITORIAL ACKNOWLEDGEMENT**
   Lili Liu offered a territorial acknowledgement along with a personal reflection.

2. **CONFLICT OF INTEREST**
   Senators were asked to declare any conflicts they may have in relation to the items on the agenda. No conflicts were declared.

3. **APPROVAL OF THE AGENDA, AND APPROVAL OF THE CONSENT AGENDA**
   A motion was heard to approve the agenda as presented, and to approve or receive for information the items on the consent agenda, listed as items 14-18 of the Senate agenda. Deakin and Hare. Carried.

4. **MINUTES OF THE 23 OCTOBER 2023 MEETING**
   A motion was heard to approve the minutes as distributed. Woudsma and Casello. Carried.

5. **BUSINESS ARISING FROM THE MINUTES**
   There was no business arising.

6. **SENATE WORKPLAN**
   The chair indicated that one item has been added to the workplan (fall budget update) and observed that two items slated for the November meeting have been deferred to the January meeting (UCSA annual report, and admissions update). This item was received for information.

7. **REPORT OF THE PRESIDENT**
   a. President's Update. Goel provided his report and offered the following:

- There continues to be heightened emotions and tensions around the conflict in the Middle East, and members of University administration have been engaged with groups impacted by the events and violence
  - o It is important for the institution to maintain a supportive, respectful and open environment for all members to safely express ideas and come together, while adhering to policies on ethical behaviour and free expression
  - o A task force will be formed in the near term to develop distinct principles to foster freedom of expression and respectful engagement
- The speaker series on antagonism and intimidation in academia is underway, with one talk completed and three more to come before the international conference on this topic that is scheduled for June 2024
- The province's Blue Ribbon Panel has provided its report, which includes recommendations to increase the tuition framework simultaneously with the provincial grant, among others recommendations
  - o The province has not provided any timeline for its response
  - o In this context, the provost's recently published op-ed on the financial challenges facing the sector was timely
- On 28 November, there will be a town hall event with regard to the University budget
- The federal government has indicated that the law will be amended such that postsecondary institutions are excluded from proceedings under the *Companies' Creditors Arrangement Act*

In response to questions, Senators were advised that students encountering/concerned about offensive speech on campus should reach out to administrators in their department/Faculty, and/or contact the Office of Equity, Diversity, Inclusion and Anti-Racism for support or to register a complaint. It was also noted that the campus environment aims to provide opportunities to engage in constructive dialogue on contentious issues, and that the search for the student ombudsperson has been launched with a view to operationalizing the office in early 2024. [Secretary's note: following the meeting, the University announced a new email address gethelp@uwaterloo.ca to expedite reporting of concerns]

8. **FACULTY UPDATE PRESENTATION – MATHEMATICS**
   Mark Giesbrecht provided a presentation on the Faculty's initiatives and events, including: the Faculty boasts leading rankings among world comparators in several subject areas; new professional programs are under development as well as new research areas, with the latter highlighted by "Data + X" programs; departments, schools and teaching units are co-located and intentionally collaborative; the faculty complement includes numerous top researchers including Canada Research Chairs, dozens of disciplinary fellows and one officer of the Order of Canada; strong research partnerships, fostered by the establishment of the Math Innovation Office in 2020; entrepreneurship is encouraged and the Faculty supports the development of start-up and student-led entrepreneurship; strong teaching and pedagogy, with a common core across mathematics, computer science and statistics and resources devoted to supporting teaching enhancement; the Faculty is transitioning from a five-year strategic plan to a strategic framework; role of CEMC is supporting teaching excellence and innovation.

9. **APPROVAL OF MEMBERSHIP TO SENATE COMMITTEES AND COUNCILS**
   A motion was heard to elect Nicholas Pellegrino as a member of Senate Graduate & Research Council, term to 30 April 2025, as described in the report. Casello and Sivoththaman. Carried.

10. **REPORT – SENATE GRADUATE & RESEARCH COUNCIL**
    Casello provided an overview of items (a)-(c).
    a. Major Program Modification for Master of Accounting (MAcc)
    A motion was heard to approve the addition of a part-time registration option for the Master of Accounting program, effective 1 January 2024, as presented. Casello and Woudsma. Carried.

    b. Major Program Modification for Master of Taxation (MTax) – Co-operative Program
    A motion was heard to approve the addition of a direct entry Co-operative program/option for the Master of Taxation program, effective 1 January 2024, as presented. Casello and MacEachen. Carried.

c. Major Program Modification for the Doctor of Philosophy (PhD) in Vision Science and Master of Science (MSc) in Vision Science
A motion was heard to approve the revisions to the Graduate Research Fields for the PhD and MSc in Vision Science, effective 1 September 2024, as presented. Casello and Houser. Carried.

11. **JOINT REPORT – SENATE GRADUATE & RESEARCH COUNCIL, AND SENATE UNDERGRADUATE COUNCIL**
    a. Class Components Definitions
    Casello gave a short overview of the report, and members clarified that practicum requirements are different within graduate studies compared to the undergraduate level. A motion was heard to approve the adoption of the new Class Components Definitions for the Undergraduate Studies Academic Calendar and the Graduate Studies Academic Calendar, effective January 1, 2024, as presented. Casello and Dong. Carried

12. **SENATE FINANCE COMMITTEE: CONTINUATION OF REPORT FROM OCTOBER 2023 SENATE MEETING**
    Rush spoke to the new University Financial Accountability Framework and noted the following: the framework is under development and the University sector has been engaged with the province in providing feedback; purpose of the framework is to conduct additional monitoring and assessment of the financial health of Ontario universities, and in some cases to require follow up actions; a technical manual was released by the province in October 2023, with eight defined financial metrics (along with the institution's credit rating) to assess the financial health of a university; as at 30 April 2023, the University of Waterloo is measuring well against the announced metrics and is also developing processes to proactively assess the impact of changes to the operating budget on the financial health metrics.

    Fieguth presented on the Waterloo Budget Model and noted the following: key objective to identify guiding principles for budget modelling with attention to transparency, efficiency and migrating to a paradigm of integrated planning; aiming to make improvements to data supports for budget planning; anticipate coordination between the Budget Office (which is to be formed) and the Faculties/ASUs; aiming to have the budget model in place for the 2025-26 fiscal year, and currently making efforts to finalize templates and processes to support integrated planning. In response to questions, it was clarified that compared to previous models, the new budget model will be more reflective of actual cost realities, while also being rooted in an improved data set.

13. **AMENDMENT TO FACULTY CONSITUTION**
    a. Proposed Amendments to the Constitution and By Laws Of The Faculty Council
    Goel observed that the covering report highlights the continued need for the Faculty to request an exception to Policy 45 to add one additional faculty member to decanal nominating committee, if the Faculty is to utilize its approved process for selecting those members, and that this will be the case until said policy may be amended in the future (the provost plans to raise this item at an upcoming meeting of the Faculty Relations Committee). Chris Houser provided an overview of the documents, noting that these have not been updated in 30 years and serve to formalize practices that have evolved over time in the Faculty. Members provided a minor correction to the documents put forward for approval to update the name of Co-operative and Experiential Education. One member inquired as to the reasoning for the reduction in student representation on the Faculty Council; Houser indicated that the Faculty is building alternate processes to best engage with students, and will liaise further directly with the senator following the meeting. A motion was heard to approve the amendments to the Constitution and By Laws of the Science Faculty Council as presented. Houser and Deakin. Carried, with one opposed and four abstaining.

CONSENT AGENDA
The consent agenda was approved under item 3, with items approved or received for information.

14. **REPORT – SENATE GRADUATE & RESEARCH COUNCIL**
    a. Regulation Revisions to the Graduate Studies Academic Calendar
    Motion: That Seante approve the regulation revisions to the Graduate Studies Academic Calendar (GSAC), effective 1 January 2024, as presented.

15. **REPORT – SENATE UNDERGRADUATE COUNCIL**
    Received for information.

16. **JOINT REPORT – SENATE GRADUATE & RESEARCH COUNCIL, AND SENATE UNDERGRADUATE COUNCIL**
    a. **Academic Calendar Dates for 2024-25**
       Motion: That Seante approve the 2024-2025 academic calendar dates and calendar guidelines for establishing academic dates, as presented.

17. **REPORT – VICE-PRESIDENT, RESEARCH & INTERNATIONAL - AWARDS, DISTINCTIONS, GRANTS, WATERLOO INTERNATIONAL ENGAGEMENTS**
    Received for information.

18. **REPORT OF THE PROVOST – FACULTY APPOINTMENTS, LEAVES**
    Received for information.

19. **OTHER BUSINESS**
    With no further business in open session, Senate convened in confidential session.

15 December 2023   Mike Grivicic
MG/dg   Associate University Secretary to
                                    Senate

2023-2024 Senate Work Plan

Office of the Secretariat

Senate Agenda Items · expected *as needed	15 May 2023	19 June 2023	18 September 2023	23 October 2023 *Strategic Plan Annual Update / Waterloo at 100*	27 November 2023	29 January 2024	4 March 2024	8 April 2024
REGULAR AGENDA (including items for information and discussion)								
Minutes	·	·	·	·	·	·	·	·
Business Arising	·	·	·	·	·	·	·	·
LEADERSHIP UPDATES[6]								
Report of the Vice-President, Academic & Provost	*	*	*	*	*	*	*	*
Report of the Vice-President, Research and International	*	*	*	*	*	*	*	*
COMMITTEE/COUNCIL REPORTS								
Executive Committee	*	*	*	*	*	*	*	*
Graduate & Research Council (GRC)	·	·	·	·	·	·	·	·
Undergraduate Council (UC)	·	·	·	·	·	·	·	·
Long Range Planning Committee				·		·		·
Fall Update, University Operating Budget				·				
Joint Report of GRC & UC, Academic Calendar Dates[1]					·			
University Committee on Student Appeals Annual Report[1] (Policy 72)					·			
University Appointment Review Committee Annual Report[1] (Policy 76)								·
Finance Committee - Budget Update[3]							·	
Finance Committee - Budget recommendation[2, 3]								·
OTHER SENATE AGENDA ITEMS								
New Senator Orientations (before meeting)	·							
Teaching Awards Committee							·	
Delegation of Roster of Graduands								·
Report of Roster of Graduands		·		·				
Convocation Report (CR&E) – summary of previous years' ceremonies								·
Undergraduate and Graduate Admissions Update						·		
Conduct Self-Assessment Survey[1]							·	
SENATE PRESENTATIONS								
Presentations from the Presidents of the Faculty Association, Waterloo Undergraduate Association and Graduate Student Association[1]							·	
Strategic Plan Accountability Update[1] (June)								
PART Annual Update		·						
Faculty Update (6x/year)			ENG	HLTH	MATH	ENV	ARTS	SCI

[1] Annual item
[2] Board of Governors approval
[3] Presented by the Vice-President Academic and Provost
[4] Presented by the President and Vice-Chancellor, and Chair of Senate
[5] Presented by the University Secretary
[6] Leadership updates may include such topics as: Talent, We Accelerate Report, Communities (EDI, Sustainability); Waterloo International, etc.

Senate Agenda Items · expected *as needed	15 May 2023	19 June 2023	23 September 2023	23 October 2023 *Strategic Plan Annual Update / Waterloo at 100*	27 November 2023	29 January 2024	4 March 2024	8 April 2024
CONSENT AGENDA								
Reports from Faculties (e.g., appointments, administrative appointments, sabbaticals)[2]	·	·	·	·	·	·	·	·
Tenure and Promotion Report[4]			·					
University Professor Designation[3]							·	
Call for Nominations for University Professor[3]			·					
Call for Nominations for Honorary Degree Recipients[4]						·		
Report of the COU Academic Colleague[1]	·							
Senate Committee Appointments[5]	*	*	·	*	*	*	*	*
CLOSED AGENDA								
Minutes	·	·	·	·	·	·	·	·
Business Arising	·	·	·	·	·	·	·	·
Reports from Committees and Councils	*	*	*	*	*	*	*	*
Honorary Degree Recommendations	*	*	*	*	·	·	*	*
Reports from Search and Review Committees for Policy-based Senior Leadership Appointments and Reappointments	*	*	*	*	*	*	*	*
Report of VP Advancement on Policy 7[1]		·						

Joint SENATE/BOARD Strategic Plan Focus Sessions 3-4:30	Joint SENATE/BOARD Continuing Education Sessions 3-4:30
• To be determined	• To be determined

Special Topics for 2023-2024 to be Scheduled:

- President's Anti-racism Task Force Update (PART)

For more information: secretariat@uwaterloo.ca
uwaterloo.ca/secretariat, NH 3060

[1] Annual item
[2] Board of Governors approval
[3] Presented by the Vice-President Academic and Provost
[4] Presented by the President and Vice-Chancellor, and Chair of Senate
[5] Presented by the University Secretary
[6] Leadership updates may include such topics as: Talent, We Accelerate Report, Communities (EDI, Sustainability), Waterloo International, etc.

Return to Agenda

UNIVERSITY OF WATERLOO

Office of the Vice President, Research and International

For Discussion   **Open Session**

To:	**Senate**
Sponsor: **Contact Information:**	Charmaine B. Dean, Vice President Research and International vpri@uwaterloo.ca
Presenter: **Contact Information:**	Charmaine B. Dean, Vice President Research and International vpri@uwaterloo.ca
Date of Meeting:	**January 29, 2024**
Agenda Item Identification:	**8. 2023 Annual Report, Office of the Vice-President, Research and International**

Summary:

Presenting the Vice-President, Research and International Report to Senate for the year 2023. This report to Senate highlights research, international and entrepreneurial program data, outputs and outcomes for 2023 across the thematic areas of: Research and Government Partnerships; International Collaboration; Research Excellence; Safeguarding Research; and Commercialization and Entrepreneurship.

Documentation Provided:

- Vice-President, Research and International Annual 2023 Report to Senate

2023 ANNUAL REPORT

OFFICE OF THE VICE-PRESIDENT,
RESEARCH AND INTERNATIONAL

UNIVERSITY OF WATERLOO

Research and Government Partnerships

DIVERSIFY AND EXPAND CORPORATE AND RESEARCH PARTNERSHIPS

Figure 1: University of Waterloo Partnership Funding

Legend:
- Mitacs
- NSERC Alliance
- Government Contracts

Year	Total	Mitacs	NSERC Alliance	Government Contracts
2018/19	$39.8M	$1.3M	$13.7M	$24.8M
2019/20	$39.8M	$1.9M	$14.3M	$23.6M
2020/21	$43.5M	$3.1M	$15.1M	$25.3M
2021/22	$41.5M	$3.6M	$11.5M	$26.4M
2022/23	$49.6M	$5.1M	$15.9M	$28.5M

Total partnership funding 2021/22 to 2022/23 — 19% ↑

Source: InfoEd
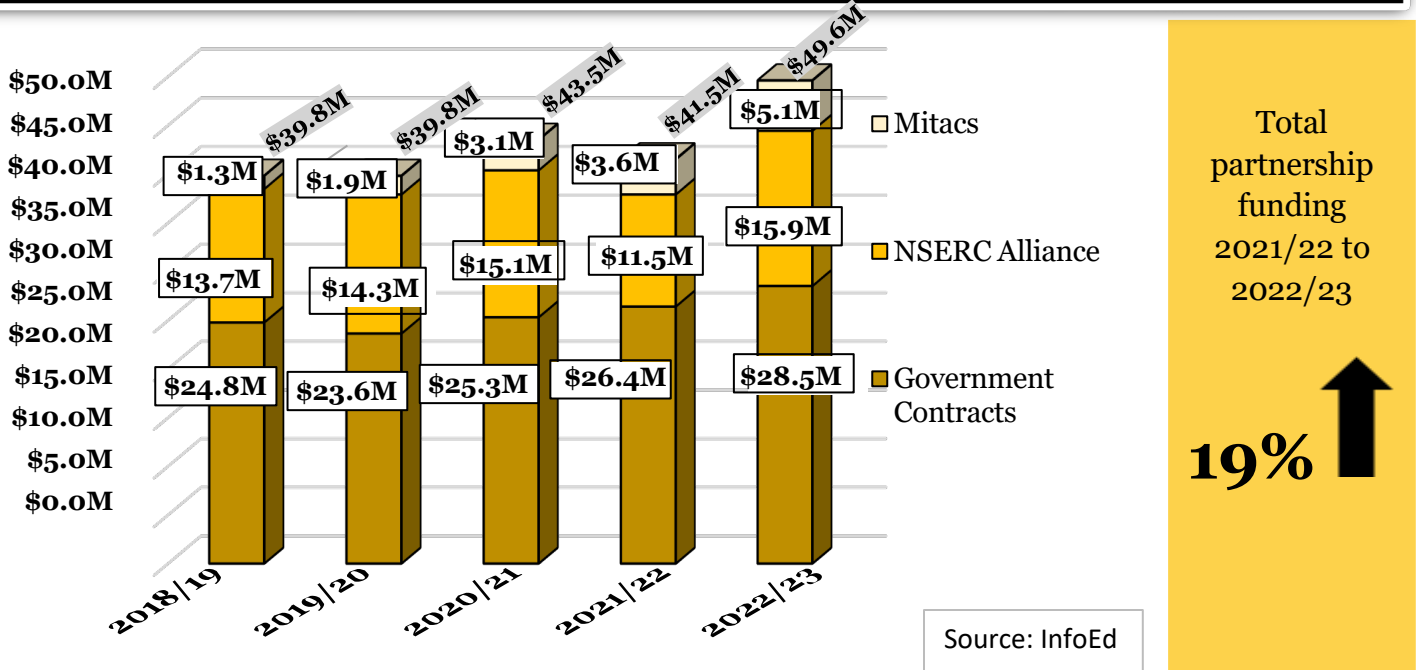
A total of **$19.3 million** in new international grants and contracts awarded + **70** new research MOUs signed (marked in yellow on the map below)
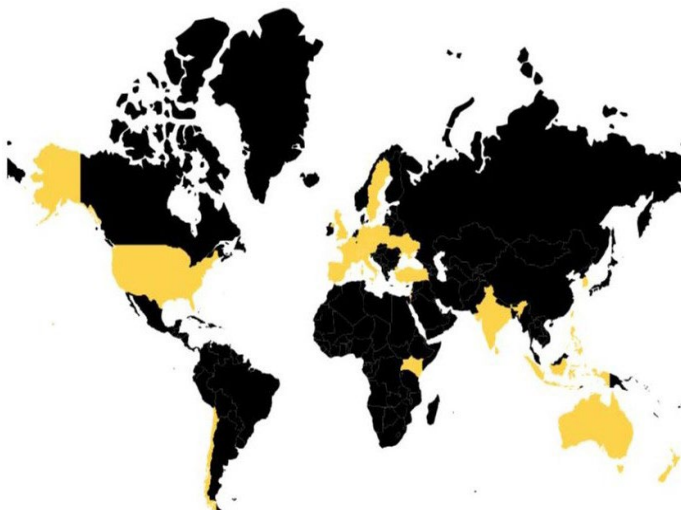
Figure 2: University of Waterloo Non-Profit Funding

Total non-profit funding 2021/22 to 2022/23 — **17%** ↑

2018/19	2019/20	2020/21	2021/22	2022/23
$7.9M	$6.7M	$8.2M	$8.7M	$10.1M

Source: InfoEd
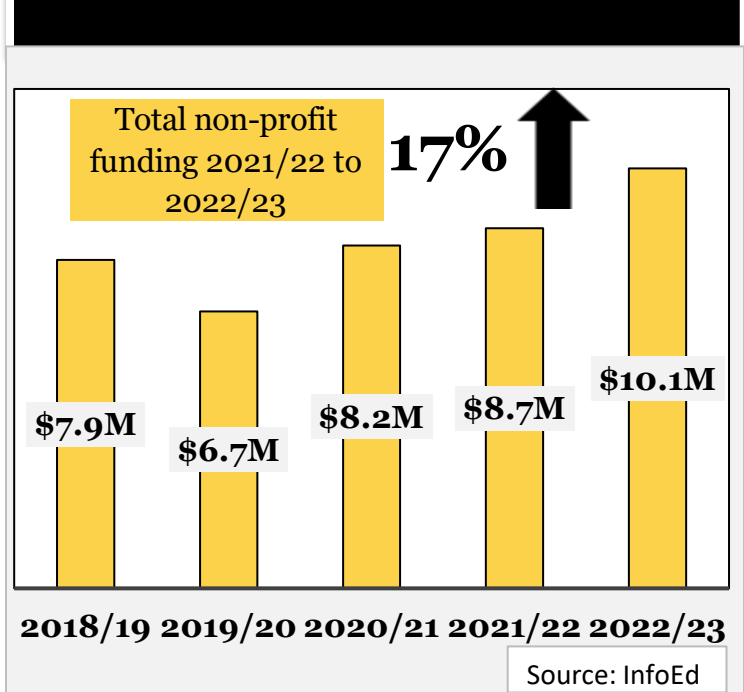
Waterloo International

🌐 STRENGTHEN AND EXPAND INTERNATIONAL PARTNERSHIPS

Global Affairs Canada International Scholarship Program
- 8 Canada-*ASEAN Student Exchange Scholarships
- 7 Emerging Leaders in the Americas Student Exchange Scholarship
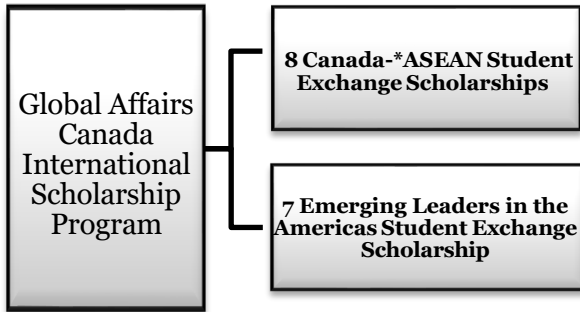
*Association of Southeast Asian Nations

Co-ordination of International Education Week

Co-ordination of Global Skills Opportunities

Safety Abroad

5,158 people supported in 2023

Student Mobility Agreements

575	483	146
Outbound student exchanges	**Inbound student exchanges**	**Students on Joint academic agreements**

Waterloo International supported important meetings between Waterloo leaders and representatives of international universities, Canadian government missions abroad, and foreign governments' ministries, embassies, high commissions, and consulates. Those meetings took place in Waterloo and around the world in 23 different countries.

The VPRI also participated in eight Provincially led trade missions to Asia, Europe, India, South America and the United States.

Some of the 23 international countries engaged include the following countries:

China	France	Germany	Ghana	India

Indonesia	Japan	The Netherlands	South Africa	United Kingdom

2023 Annual Report – Office of the VPRI

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Research Excellence

ADVANCE AND PROMOTE RESEARCH EXCELLENCE

Ranked Canada's #1 Comprehensive Research University for 16 consecutive years by Research Infosource Inc. in Canada's Innovation Leaders 2023 publication.

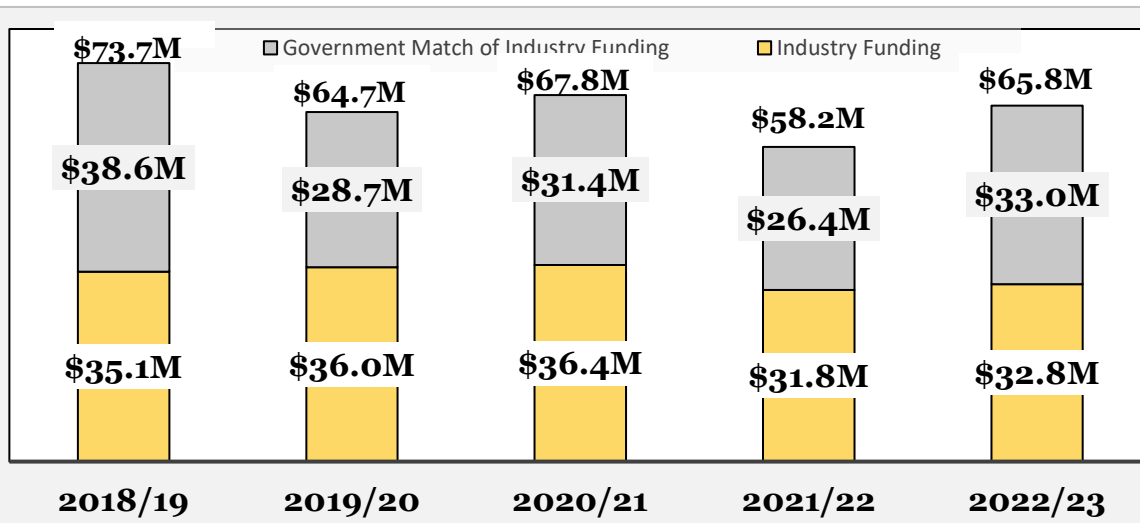### Figure 3: University of Waterloo Total Research Funding

Arrows show 2021/22 to 2022/23 trend

☐ Universities ↓
☐ Public Sector - Other ↓
■ Provincial ↑
☐ Non Profit ↑
☐ Industry ↑
■ Federal Tri-Agency ↓
■ Federal (Excluding Tri-Agency) ↑

Bar totals: $258.3M (2018/19), $247.7M (2019/20), $245.2M (2020/21), $231.2M (2021/22), $249.1M (2022/23)
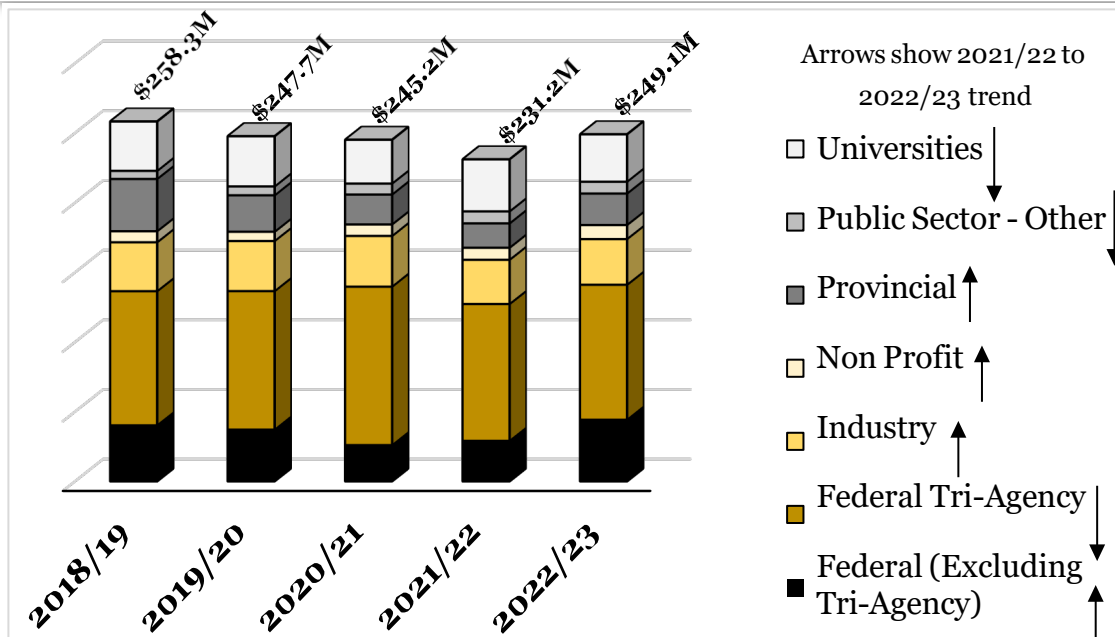
Total Waterloo research funding 2021/22 to 2022/23

8% ↑

Source: InfoEd

Figure 4: University of Waterloo Industry Funding Trend

☐ Government Match of Industry Funding   ☐ Industry Funding

Year	Total	Government Match	Industry Funding
2018/19	$73.7M	$38.6M	$35.1M
2019/20	$64.7M	$28.7M	$36.0M
2020/21	$67.8M	$31.4M	$36.4M
2021/22	$58.2M	$26.4M	$31.8M
2022/23	$65.8M	$33.0M	$32.8M

Total Waterloo industry funding with government match 2021/22 to 2022/23

13% ↑

Source: InfoEd

*only specific Gov't match programs – see data notes

2023 Annual Report – Office of the VPRI

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[Return to Agenda]

Research Excellence

ADVANCE AND PROMOTE RESEARCH EXCELLENCE

Figure 5: University of Waterloo Health Technology

2017/18	2018/19	2019/20	2020/21	2021/22
$36.3M	$32.7M	$25.9M	$43.3M	$36.7M
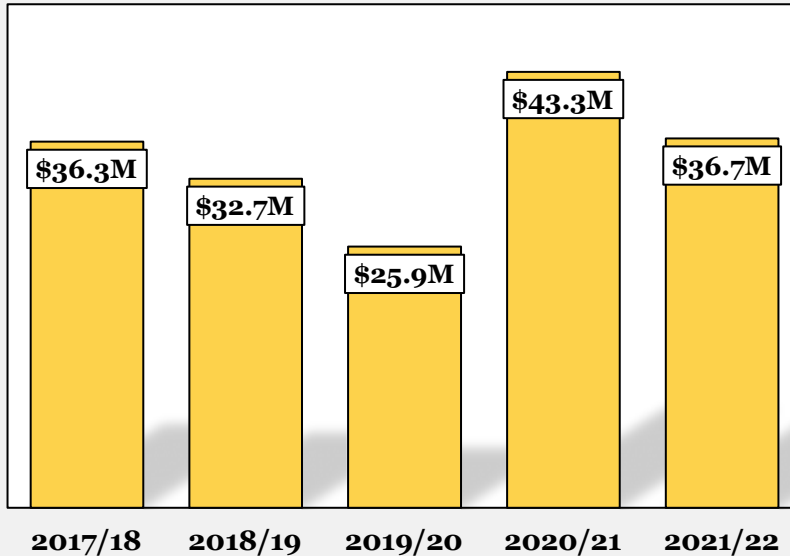
Source: See data note page

Health Research Highlights

- Signed agreement with Northern Ontario School of Medicine University
- Schlegel-UW Research Institute for Aging wins Research Canada 2023 Organization Leadership in Advocacy Award
- 10 Canada Biomedical Research Fund proposals developed
- 19 high impact health research media stories

Selection of health impact studies

Figure 6: Comprehensive University CIHR Funding 2022/23

Year	2018	2019	2020	2021	2022
Waterloo Rank	2	2	1	1	2

Funding values: $8.1M, $7.7M, $7.5M, $6.3M, $5.1M, $3.9M, $2.9, $2.7M, $2.2M, $1.5M, $0.7M
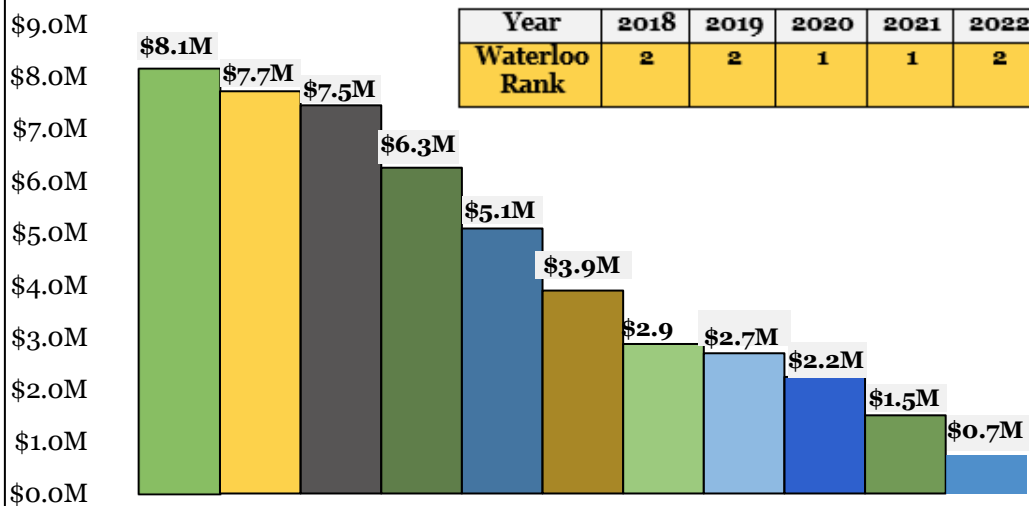
Legend: Victoria, Waterloo, Simon Fraser, University of Guelph, York, TMU, UQAM, Concordia, Carleton, Windsor, UNB

Source: CIHR Public database   Comprehensive- without a medical school

Research Excellence

ADVANCE AND PROMOTE RESEARCH EXCELLENCE

Figure 7: U15 NSERC Funding 2022/23

University	Funding
Toronto	$101.6M
UBC	$87.8M
Alberta	$79.3M
Waterloo	$73.4M
McGill	$66.8M
Calgary	$52.0M
Laval	$48.7M
Dalhousie	$42.5M
Montréal	$41.5M
Queen's	$40.3M
Western	$35.9M
Saskatchewan	$35.8M
Ottawa	$33.3M
McMaster	$33.0M
Manitoba	$23.8M

Year	2018	2019	2020	2021	2022
Waterloo Rank	4	4	4	4	4

Source: NSERC Public database

Figure 8: University of Waterloo SSHRC Funding

Year	Funding
2018/19	$5.9M
2019/20	$7.0M
2020/21	$8.7M
2021/22	$5.9M
2022/23	$5.1M

Source: InfoEd
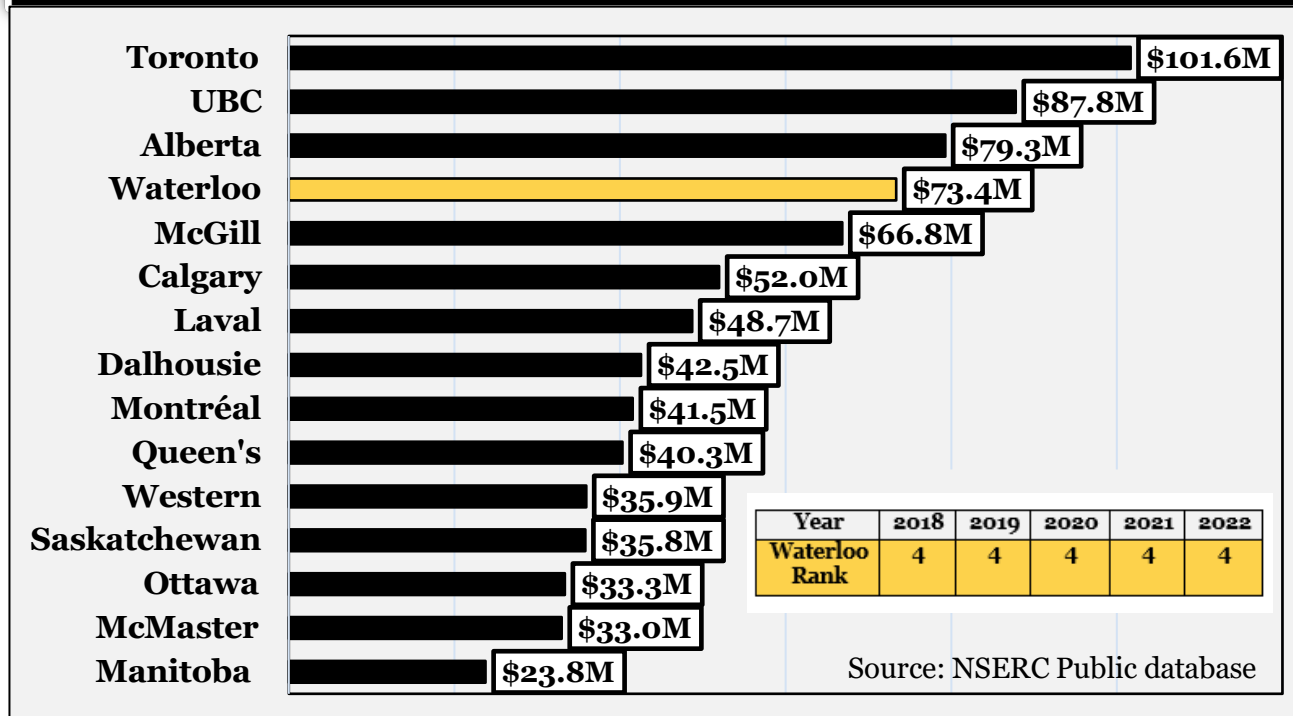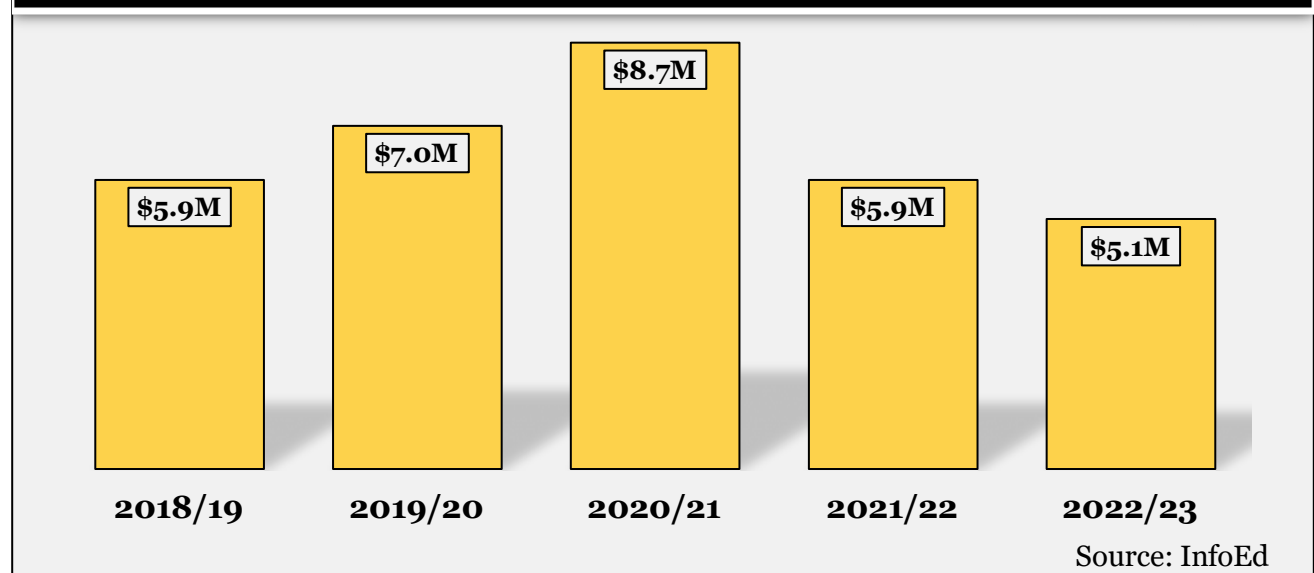
Research Excellence

ADVANCE INTERDISCIPLINARY RESEARCH

New Frontiers in Research Funding (NFRF): world-leading interdisciplinary, international, high-risk / high-reward, transformative and rapid-response Canadian-led research.

NFRF 2022 Exploration Competition

- Waterloo
  7 Projects funded
- $1.7 million in funding
- 11 Collaborating institutions/ organizations
- 25 Collaborating researchers
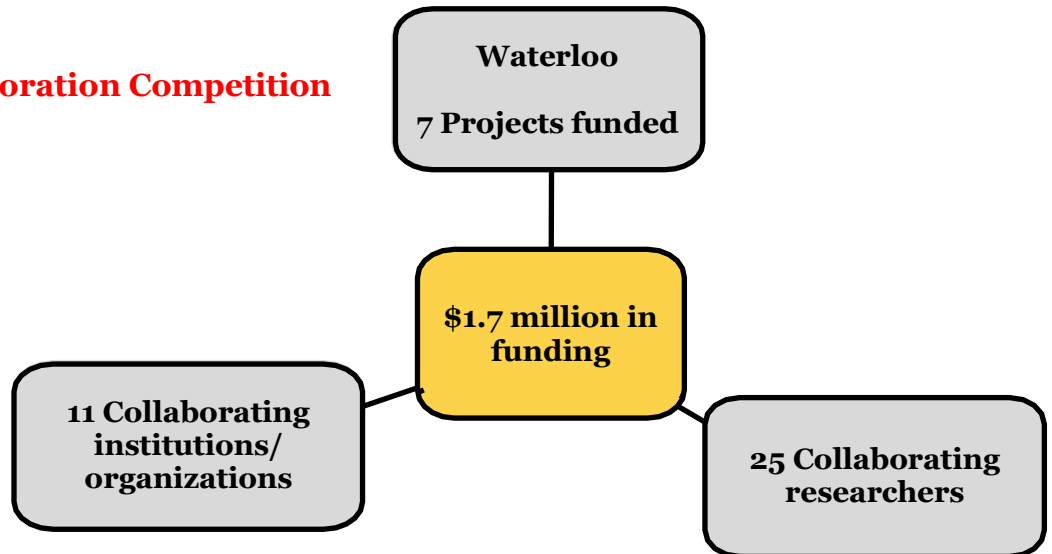
NFRF 2022 Special Call Competition

- Waterloo
  3 Projects funded
- $1.2 million in funding
- 20 Collaborating institutions/ organizations
- 26 Collaborating researchers
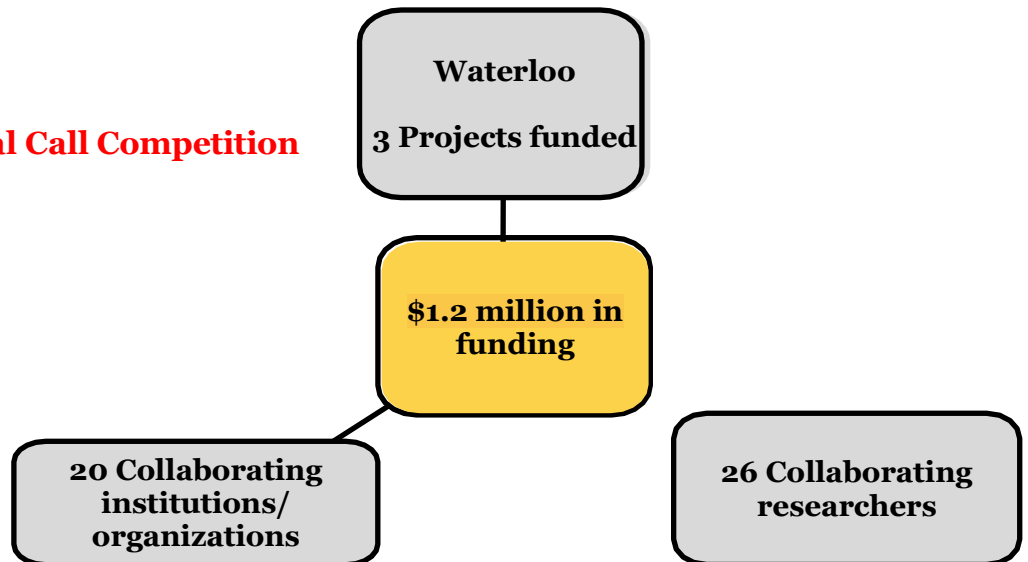
Research Excellence

⬡ LEAD EQUITY, DIVERSITY AND INCLUSION IN RESEARCH INITIATIVES

Highlights

(200+) consultations on research equity and Indigenous research

(45+) training sessions at University, Faculty and project levels

(100+) grant application reviews

- **Launched** Inclusive Research Resource Hub

Canada Research Chair Equity Diversity and Inclusion Targets

- Developed Chair allocation plan with the Faculties

Figure 9: University of Waterloo Proportion of CRCs as FDGs				
Tier 1 Chairs	Dec.2023 percentage of current chairs	2025 Gov't targets *	2029 Gov't targets	
Women Chairs	30.0%	37.0%	50.9%	Waterloo did not meet our 2022 EDI targets but met the 2025 interim EDI targets except for Tier 1 Women chairs (-7%).
Racialized Chairs	30.0%	17.5%	22.0%	
People with a Disability	11.0%	5.3%	7.5%	
Indigenous Chairs	4.0%	2.3%	4.9%	
Tier 2 Chairs				
Women Chairs	48.0%	37.0%	50.9%	We are working towards meeting the 2029 targets.
Racialized Chairs	20.0%	17.5%	22.0%	
People with a Disability	10.0%	5.3%	7.5%	
Indigenous Chairs*	10.0%	2.3%	4.9%	

*2025 Gov't target may change

December 2023

Research Excellence

⬡ ADVANCE FACULTY AWARD ACHIEVEMENT

Figure 10: 2024 Faculty Award Ratio: Macleans Best Canadian Comprehensive Universities

Source: Macleans Award Ranking
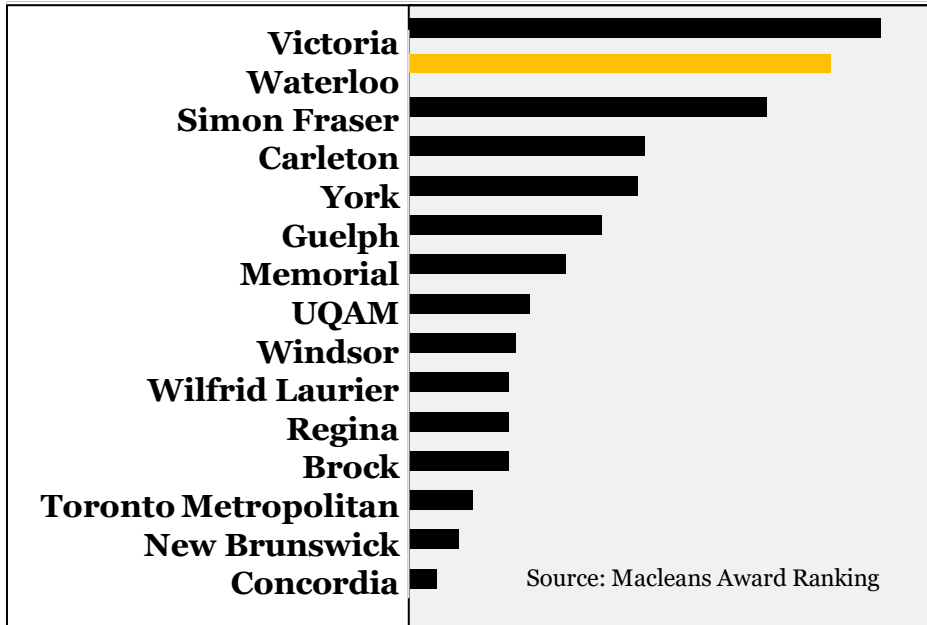
Waterloo rank for Comprehensive Universities

Year	2022	2023	2024
Waterloo Rank	2	2	2

Figure 11: University of Waterloo Award Rank: Top 12 Universities in Canada (Top Rank=1)

University	2024 Rank	2023 Rank	2022 Rank	2021 Rank	2020 Rank	
Toronto	1	1	1	1	1	Over a five-year period, Waterloo moved from
McGill	2	2	2	3	3	
Ottawa	3	3	7	7	10	
Victoria	4	5	4	4	4	
Dalhousie	5	7	6	5	8	
Queen's	6	4	3	2	2	
Waterloo	7	9	10	10	11	11th to 7th rank
McMaster	8	6	5	9	9	
Montreal	9	10	12	12	5	
Alberta	10	8	8	8	5	
SFU	11	12	10	11	12	
UBC	12	10	9	6	7	

Source: Macleans Award Ranking

Safeguarding Research

SAFEGUARD RESEARCH AND DIVERSIFY CORPORATE AND GOVERNMENT RESEARCH PARTNERSHIPS

Safeguarding Research Key activities 2023:

- Worked with **150+** researchers to develop grant related security risk mitigation plans.

- Actively engaged both the Federal and Provincial Government to advance university priorities and practices to help shape emerging, and increasingly complex, government regulatory regimes.

- Led Canadian and Ontario universities in protecting researchers and safeguarding science through such initiatives as the **U15** and **Ontario Council on University Research (OCUR)** Research Security Leading Practice Documents.

- Established an Ontario Community of Practice to communicate with government stakeholders, build capacity and share resources amongst member institutions.

- **Created online safeguarding research resource hub**
  - Including **research security and cybersecurity training modules**

Waterloo Ventures

(((O))) REINFORCE WATERLOO'S DISTINCTIVE BRAND OF PRE-EMINENCE IN INNOVATION

Velocity

- **+2,000 students** engaged in the Velocity Pitch Competition | Cornerstone | Velocity Digital and Science programs.

- Record 100 applicants for the Fall 2023 Velocity Pitch Competition

- Velocity eco-system spans University of Waterloo Campus

Campus partners

Supporting and Promoting Student Entrepreneurs

Up-Start Program

- 20 teams in the program secured $20,000 in Velocity seed funding.

- The teams completed four-month Velocity Cornerstone Program to develop marketing plan, customer interviews and IP strategies.

- Six teams gained paid customer pilots and/or purchase orders.

- The *Up-Start Program* was a pivotal program that helped Coastal Carbon secure $1.6 million in seed funding from the Federal Ocean Supercluster Program (See impact story on page 13).

((o)) Impact Stories

AI Driven Sensors for Seawood Measurement Project

Waterloo Alumni co-founders of **Coastal Carbon** use AI sensors to monitor seaweed growth to accelerate regenerative seaweed farming and ocean restoration, and scale blue carbon initiatives.

Blue carbon initiatives help protect costal eco-systems for biodiversity, human well-being and climate change.

Kelly Zheng, Conrad School of Entrepreneurship and Business and Thomas Storwick, Faculty of Engineering

Three student Waterloo Velocity teams win 2023 hackathon challenge: *Imagining the Future of Finance*

VOffice - *First place team members Henry Wang, Eric Zhang, Ryan Nguyen, Ian Korovinsky and Stephen Ni*

Finquest - *Second place team members Mahdi Raza Khunt, Silvia Ban, Ashin James, Zafar Erkinboev, Karmanbir Sing Batth*

Fintopia- Jospeh Scarfone *has a team made of members from Environment, Math and Engineering.*

Waterloo Ventures

 Impact Story

Problem

Over 30 million tonnes of plastic waste are in oceans and over 16% of dairy products (116 million tonnes) are discarded globally each year.

Solution

Proprietary bacteria that will cost effectively produce biodegradable plastic from organic waste (dairy lactose validation).

Applications

To decompose products such as packaging film, plastic bags, food containers, biofuels, plastic bottles, drug carriers, clothing, medical devices, 3D printing.
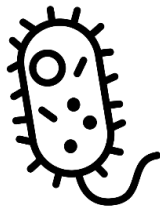
WatCo: Entrepreneur Success Story

Dr. Trevor Charles,
Professor of Biology
University of Waterloo
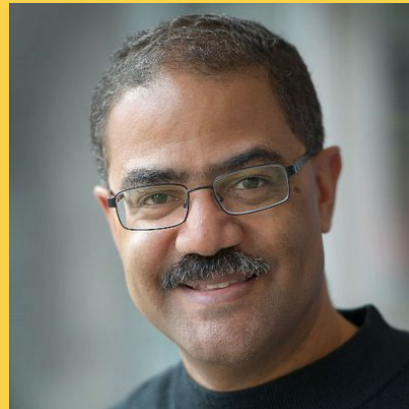
Eco-system support:

- Filed Canadian and U.S. patents
- Incorporated startup company
- Awarded Waterloo Ventures Up-Start Program $15K
- Winner GreenHouse Social Impact Showcase $5K
- Participated in Velocity Venture Ready Program
- Numerous prospective customer letters of intent to purchase bacteria.

VPRI ANNUAL PLAN DATA NOTES FOR FIGURES:

Figure 1: University of Waterloo Partnership Funding
Source: InfoEd funding data is from April 1 to March 31 each year.

Figure 2: University of Waterloo Total Non-Profit Funding
Source: InfoEd funding data is from April 1 to March 31 each
year.

Figure 3: University of Waterloo Total Funding
Source: InfoEd funding data is from April 1 to March 31 each
year.

Figure 4: Industry Funding Trend
Source: InfoEd funding data is from April 1 to March 31 each year.
Government match of industry funding shows the Government portion of matching/leveraged funds for the
following project sponsors:
NSERC Alliance | ORF-RE | OCI | FedDev | Mitacs |
Small amounts from APC | Communitech | DND/NSERC RSCH Partnership PGM |

Figure 5: University of Waterloo Health Technology Funding
Source: CIHR + NSERC + SSHRC+CFI Public Databases using a combination of keywords
provided by the Transformative Health Technology team from May 1 to April 30 each year.

Figure 6: Comprehensive University CIHR Funding 2022/23
Source: CIHR Public database from April 1 to March 31, 2023.

Figure 7: U15 NSERC Funding 2022/23
Source: NSERC Public database from April 1 to March 31, 2023.

Figure 8: University of Waterloo SSHRC Funding
Source: InfoEd funding data is from April 1 to March 31 each year.9

Figure 9: CRC EDI targets
Source: Institutional Research team data is for 2025 interim targets set by the Federal Government
Other notes: A women includes people who identify as women and gender minorities | The definition for
'person with a disability' is aligned with the UWaterloo Equity Survey, not with the Employment Equity
Act.

Figure 10: 2024 Faculty Award Ratio: Macleans Best Canadian Comprehensive Universities
Source: Macleans faculty award ranking
Data is for previous five-year period; 2024 ranking is for 2019 to 2023 data.
Each annual ranking shows the number of faculty members who have won major awards over the past
five years, including Killam, Molson and Steacie prizes, the Royal Society of Canada awards, the 3M
Teaching Fellowships and more than 30 other award programs. The total award count is divided by the
number of full-time faculty.

Figure 11: See above. Data shows top 12 Universities in Canada in the ranking not only Comprehensive
Universities.

Other data notes in order of report placement:

International research partnership funding and country data
Source: InfoEd funding data is from October 1, 2022 to October 1, 2023.

Government relations and lobbying activities
Source: Associate Director, Government Relations and Communications Jan. 1, 2022 to Dec.31, 2023.

Waterloo International Data
Source: Waterloo International team data is from 2022/23 Academic year

SSHRC NFRF data for 2022 competition year
Source: SSHRC Public NFRF dashboard

Equity Diversity and Inclusion
Source: Equity, Diversity and Inclusion in Research team data is for the period January 2022 to October 2023.

Research InfoSource ranking data
Source: Research Infosource ranking 2023
Data notes: The following indicators included in the Research Infosource Inc. ranking:

- *Total sponsored research income includes all funds to support research received in the form of a grant, contract or contribution from all sources external to the institution | Data from Statistics Canada (20%).*
- *Research intensity per faculty member=faculty head counts for 2021/22 for full/part-time: full, associate and assistant ranks | Data from Research Infosource's Canadian University R&D Database (20%).*
- *Research intensity per graduate student= graduate student numbers for 2021/22 in graduate programs leading degrees, certificates and diplomas | Data from Ontario Ministry of Advanced Education and Skills Development (10%).*
- *Total number of publications in leading journals (20%) | Web of Science*
- *Publication intensity (20%) |Web of Science*
- *Publication impact (10%) | Web of Science*

Safeguarding research data is for the calendar year 2023.
Source: VPRI Safeguarding Research team

Velocity student program data is for the period from January to October 2023.
Source: Waterloo Ventures- Velocity team

Up- Start Program data is between August 2022 and January 2023
Source: Waterloo Ventures-Velocity Up-Start team

WatCo: Entrepreneur Success Story data is for Academic year 2022/2023
Source: Waterloo Ventures- WatCo. team

UNIVERSITY OF WATERLOO

For Approval   **Open Session**

To: **Senate**

Sponsor: Secretariat
Contact Information: senate@uwaterloo.ca

Date of Meeting: **January 15, 2024**

Agenda Item Identification: **10. Approval of Membership to Senate Committees and Councils**

Recommendation/Motion:

To elect Joel Dubin to the Senate Long Range Planning Committee as the member from the Board of Directors of the Faculty Association of the University of Waterloo, term to 30 April 2024.

Summary:

The Faculty Association of the University of Waterloo has nominated Joel Dubin to fill the vacancy on this committee, for the remainder of the 2023-24 academic year. The terms of reference for the committee indicate that this member is elected by Senate; at the Senate meeting further nominations will be accepted from the floor and should there is more than one name for the position, an electronic election will follow the meeting.

Jurisdictional Information:

As provided for in Senate Bylaw 2, section 1.04, Senate Executive Council is empowered:

   e. To present to Senate, normally at the last regular meeting in the academic year in April, a list of nominations for the committees and councils of Senate.

Governance Path:

Senate Executive Committee (mm/dd/yy): 01/15/24

Senate approval date (mm/dd/yy): 01/29/24

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UNIVERSITY OF WATERLOO | Senate

Senate Graduate & Research Council

For Approval   **Open Session**

To:	**Senate**
Sponsors:	Charmaine Dean Vice-President, Research & International Jeff Casello Associate Vice-President, Graduate Studies and Postdoctoral Affairs
Presenter: **Contact Information:**	Charmaine Dean vpri@uwaterloo.ca
Date of Meeting:	January 29, 2024
Agenda Item Identification:	**11a. Report – Senate Graduate & Research Council:** **Dissolution of the Survey Research Centre (SRC)**

Recommendation/Motion:

To approve the dissolution of the Survey Research Centre (SRC), as presented.

Summary:

Senate Graduate & Research Council met on November 20, 2023 and agreed to forward the following item to Senate for approval as part of the regular agenda.

Jurisdictional Information:

This item is being submitted to Senate in accordance with Senate Bylaw 2, section 4.03(g): "Consider, study and review all proposals for new centres and institutes, and the closure of centres and institutes, and make recommendations to Senate thereon."

Governance Path:

Senate Graduate & Research Council approval date (mm/dd/yy): 11/20/23

Highlights/Rationale:

A recommendation that the Survey Research Centre be dissolved received from Christiane Lemieux, Associate Dean, Math, Operations and Academic in consultation with Sheila Ager, Dean of Arts; Mark Giesbrecht, Dean of Math; Martin Lysy, Director, Statistical Consulting and Collaborative Research Unit; and Executive Director, Survey Research Centre, Leia Minaker. There were no issues related to this closure identified by the Office of Research or Senate Graduate & Research Council, and both the Dean of Arts and the Dean of Math provided letters supporting the closure of the Centre.

The SRC was founded in 1999 by co-directors Mary Thompson (Statistics and Actuarial Science, hereafter SAS) and John Goyder (Sociology) for two main reasons: (i) to serve academic and institutional researchers by conducting rigorous surveys, and (ii) to conduct research on surveys as a means of creating valid and reliable datasets for research. For both inaugural co-directors of the SRC, methodological development of survey methods was a primary area of research.

Over the years, and especially with the retirement of Drs. Thompson and Goyder, the activities of the SRC have evolved from research and service to almost exclusively the latter. This is because subsequent directors and co-directors of the SRC were not survey methodologists, and instead have been faculty members from across campus who use survey methods in their research, but do not specifically research survey methods. Therefore, the designation of Research Centre at University of Waterloo no longer seems appropriate.

On September 7, 2023, the SRC was officially merged with the Statistical Consulting and Collaborative Research (SCCR) unit in SAS to form the Statistical Consulting and Survey Research (SCSR) unit. The intention is for the existing service activities of both contributing entities to continue unchanged, with ample opportunities for creating new services and improving existing ones due to synergistic restructuring of overlapping tasks. Since the operations of the centre are continuing within their new home in SAS, the budget/funds associated with the SRC have been transferred into the departmental budget and financial operations of SAS. No SRC staff positions have been or will be terminated as a result of the merger.

UNIVERSITY OF WATERLOO | Senate

Senate Undergraduate Council

For Approval   **Open Session**

To: **Senate**

Sponsor: David DeVidi
                                 Associate Vice-President, Academic

Presenter: David DeVidi
Contact Information: david.devidi@uwaterloo.ca

Date of Meeting: January 29, 2024

Agenda Item Identification: **12a. Report – Senate Undergraduate Council:**

                                 Major Modifications – Computer Engineering and Electrical Engineering

Recommendation/Motion:

To approve the creation of the Quantum Engineering Specialization in (1) the Computer Engineering plan and in (2) the Electrical Engineering plan, effective 1 September 2024, as presented.

Summary:

Senate Undergraduate Council met on November 21, 2023 and agreed to forward the following item to Senate for approval as part of the regular agenda.

Jurisdictional Information:

This item is being submitted to Senate in accordance with Senate Bylaw 2, section 5.03(b): "Make recommendations to Senate with respect to new undergraduate programs/plans, the deletion of undergraduate programs/plans, and major changes to undergraduate programs/plans."

Governance Path:

Engineering Faculty Council approval date (mm/dd/yy): 09/19/23

Senate Undergraduate Council approval date (mm/dd/yy): 11/21/23

Highlights/Rationale:

This proposal is to create a Quantum Engineering Specialization in Computer Engineering and a Quantum Engineering Specialization in Electrical Engineering, to meet the growing demand for education and training in this new and growing area. Students active in the programs when the new specializations are introduced can declare the specialization.

Proposed Revisions:

Current calendar text: https://ugradcalendar.uwaterloo.ca/page/ENG-Computer-Engineering

Proposed calendar text: (underlined and bolded = new, strikethrough = deletion)

Computer Engineering

...

Quantum Engineering Specialization

Students interested in pursuing this Specialization must achieve a minimum average of 60% in the specialization courses, and a minimum grade of 50% in each of the courses. Students who satisfy the requirements for Faculty Options, Specializations and Electives for Engineering Students will have the appropriate designation shown on their diploma and transcript.

Students need to complete:

- **ECE 305 Introduction to Quantum Mechanics**

plus 3 courses from the list below:

- **ECE 405A Quantum Info Processing Devices**
- **ECE 405B Experimental Quantum Engineering q**
- **ECE 405C Quantum Computing**
- **ECE 405D Superconducting Quantum Circuits**

Current calendar text: https://ugradcalendar.uwaterloo.ca/page/ENG-Electrical-Engineering

Proposed calendar text: (underlined and bolded = new, strikethrough = deletion)

Electrical Engineering

...

Quantum Engineering Specialization

Student interested in pursuing this Specialization must achieve a minimum average of 60% in the specialization courses, and a minimum grade of 50% in each of the courses. Students who satisfy the

requirements for Faculty Options, Specializations and Electives for Engineering Students will have the appropriate designation shown on their diploma and transcript.

Students need to complete:

- **ECE 305 Introduction to Quantum Mechanics**

plus 3 courses from the list below:

- **ECE 405A Quantum Info Processing Devices**
- **ECE 405B Experimental Quantum Engineering q**
- **ECE 405C Quantum Computing**
- **ECE 405D Superconducting Quantum Circuits**

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![University of Waterloo | Senate]

Senate Undergraduate Council

For Approval   **Open Session**

To:	**Senate**
Sponsor:	David DeVidi Associate Vice-President, Academic
Presenter: **Contact Information:**	David DeVidi david.devidi@uwaterloo.ca
Date of Meeting:	January 29, 2024
Agenda Item Identification:	**12b. Report – Senate Undergraduate Council:** **Major Modification – Nanotechnology Engineering**

Recommendation/Motion:

To approve the creation of a Nanoelectronics Specialization, Nanobiosystems Specialization, Nanofabrication Specialization, and Nanomaterials Specialization within the Nanotechnology Engineering plan, effective 1 September 2024, as presented.

Summary:

Senate Undergraduate Council met on November 21, 2023 and agreed to forward the following item to Senate for approval as part of the regular agenda.

Jurisdictional Information:

This item is being submitted to Senate in accordance with Senate Bylaw 2, section 5.03(b): "Make recommendations to Senate with respect to new undergraduate programs/plans, the deletion of undergraduate programs/plans, and major changes to undergraduate programs/plans."

Governance Path:

Engineering Faculty Council approval date (mm/dd/yy): 09/19/23

Senate Undergraduate Council approval date (mm/dd/yy): 11/21/23

Highlights/Rationale:

The inherent nature of the program is seen by the highly focused senior laboratory choices available to students. Adding these specializations will help students who are interested in focusing their studies, be able to better communicate their strengths in a particular are of nanotechnology engineering. For each specialization there are two lists. List A courses capture fundamental electives in that area of expertise, and list B courses provide an opportunity for student to further specialize. Nanotechnology Engineering students are required to choose 8 technical electives, 4 of which must be NE designated courses. In order to satisfy the requirement for a specialization, students will need to complete the designated NE454 and NE455 laboratories, choose 2 courses from List A of a specialization, and choose another 3 courses from either List A or List B. Students active in the program when the new specializations are introduced can declare the specializations.

Proposed Revisions:

Current calendar text: https://ugradcalendar.uwaterloo.ca/page/ENG-Nanotechnology-Engineering

Proposed calendar text: (underlined and bolded = new, strikethrough = deletion)

Nanotechnology Engineering

...

Specializations

The Faculty of Engineering recognizes four specializations with the Nanotechnology Engineering BASc degree. Students who satisfy the specialization requirements (courses and grades) will have the specialization designation shown on their transcript and diploma. Specializations are intended to recognize success in a concentration of electives within the Nanotechnology Engineering degree specification, where specializations focus the selection of technical electives and do not require extra courses.

Each specialization requires students to select technical electives with a common theme. Students are responsible for meeting the TE requirements of the Nanotechnology Engineering degree when pursuing a specialization. Students must declare a specialization for it to be recognized as part of their degree and appear on the transcript and diploma. To obtain a specialization, students will need to complete the two required laboratories, 2 courses from List A, and another 3 courses from either List A or List B for that specialization.

The specialization course requirements are provided below.

Nanoelectronics Specialization

The nanoelectronics specialization requires:

2 Laboratories:

NE 454A Nano-electronics Laboratory 1
NE 455A Nano-electronics Laboratory 2

List A Technical Electives:
NE 344 Electronic Circuits
NE 345 Photonic Materials and Devices
NE 471 Nano-electronics
NE 476 Organic Electronics

List B Technical Electives:
NE 459 Nanotechnology Engineering Research Project*
NE 466 Tactile Sensors and Transducers
NE 496 Nanomaterials for Electrochemical Energy Systems
ECE 331 Electronic Devices
ECE 432 Radio Frequency Integrated Devices and Circuits
ECE 444 Integrated Analog Electronics
***With approval from the Associate Director (students)**

Nanobiosystems Specialization

The Nanobiosystems Specialization requires:

2 Laboratories:
NE 454C Nanobiosystems Laboratory 1
NE 455C Nanobiosystems Laboratory 2

List A Technical Electives:
NE 335 Soft Nanomaterials
NE 381 Introduction to Nanoscale Biosystems
NE 481 Nanomedicine and Nanobiotechnology
NE 486 Biosensors

List B Technical Electives:
NE 459 Nanotechnology Engineering Research Project*
NE 487 Microfluidic and Nanobiotechnological Systems
NE 488 Biomaterials and Biomedical Design
CHE 562 Advanced Bioprocess Engineering
CHE 565 Synthetic Biology Project Design
CIVE 460/ME 574 Engineering Biomechanics
SYDE 544 Biomedical Measurement and Signal Processing
***With approval from the Associate Director (students)**

Nanofabrication Specialization

Undergraduate Council

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The Nanofabrication Specialization requires:

2 Laboratories:
NE 454B Nano-instrumentation Laboratory 1
NE 455B Nano- instrumentation Laboratory 1

List A Technical Electives:
NE 345 Photonic Materials and Devices
NE 353 Nanoprobing and Lithography
NE 461 Micro and Nano-instrumentation

List B Technical Electives:
NE 459 Nanotechnology Engineering Research Project*
MTE 545 Introduction to MEMS fabrication
ME 596 Special topics in mechanical engineering;
         Intro. Fabrication and Characterization of Nanostructures
*With approval from the Associate Director (students)

Nanomaterials Specialization

The Nanomaterials Specialization requires:

2 Laboratories:
NE 454D Nanostructured Materials Laboratory 1
NE455D Nanostructured Materials Laboratory 2

List A Technical Electives:
NE 335 Soft Nanomaterials
NE 353 Nanoprobing and Lithography
NE 491 Nanostructured Materials
NE 496 Nanomaterials for Electrochemical Energy Systems

List B Technical Electives:
NE 459 Nanotechnology Engineering Research Project*
CHE 543 Polymer Production: Polymer Reaction Engineering
ME 435 Industrial Metallurgy
ME 533 Non-metallic and Composite Materials
*With approval from the Associate Director (students)

UNIVERSITY OF WATERLOO | Senate

Senate Undergraduate Council

For Approval   **Open Session**

To: Senate

Sponsor: David DeVidi
                                Associate Vice-President, Academic

Presenter: David DeVidi
Contact Information: david.devidi@uwaterloo.ca

Date of Meeting: January 29, 2024

Agenda Item Identification: **12c. Report – Senate Undergraduate Council:**
                                 Major Modifications – Planning Honours

Recommendation/Motion:

To approve the following major modifications in Planning Honours: the creation of the Social Planning and Community Development Specialization for Plannings Honours; revisions to the Environmental Planning and Management Specialization, the Land Development Planning Specialization, and the Urban Design Specialization; and the inactivation of the Decision Support and Geographical Information Systems Specialization, effective 1 September 2024, as presented.

Summary:

Senate Undergraduate Council met on November 21, 2023 and agreed to forward the following item to Senate for approval as part of the regular agenda.

Jurisdictional Information:

This item is being submitted to Senate in accordance with Senate Bylaw 2, section 5.03(b): "Make recommendations to Senate with respect to new undergraduate programs/plans, the deletion of undergraduate programs/plans, and major changes to undergraduate programs/plans."

Governance Path:

Environmental Faculty Council approval date (mm/dd/yy): 09/14/23

Senate Undergraduate Council approval date (mm/dd/yy): 11/21/23

Undergraduate Council   **1**

Highlights/Rationale:

Creation of the new Social Planning and Community Development Specialization

This new specialization has been developed as part of the curriculum review and the minor modifications to the Planning Honours Program by the School of Planning, approved by Senate Undergraduate Council at the November 21, 2023 meeting on behalf of Senate, specifically addressing emergent priorities in planning theory and practice. Quality Assurance was consulted. Specialization average will be 75% as with all Planning Specializations.

Description to be added to the Planning webpage: "The Social Planning and Community Development Specialization will strengthen students' understanding of the relationship between built form, and social and community well-being. Specifically, students will acquire advanced knowledge of municipal policies, plans and programs that influence social equity, inclusion, capital, and foster community building, cohesion, and justice. Students completing this specialization will be well suited for a range of planning positions where social issues and community development are a priority."

Revisions to the Environmental Planning and Management Specialization, the Land Development Planning Specialization, and the Urban Design Specialization

These specialization revisions are part of the curriculum review and the minor modifications to the Planning Honours Program by the School of Planning, approved by Senate Undergraduate Council at the November 21, 2023 meeting on behalf of Senate. Students have been consulted about these changes. The required courses for the specializations are being removed as they are core for Honours Planning, meaning students must take and complete these courses regardless. For Specializations for which a name change is being proposed, students will be provided with an option of which specialization they wish to graduate with (as of June 2025 convocation). Students are expected to meet the requirements that align with the specialization name. The Application for Graduation form will require updating to reflect the title options. Communications to students, regarding Specialization title options, will be forthcoming. Quality Assurance was consulted.

Specialization Descriptions:

- Environmental Planning Specialization - The Environmental Planning Specialization strengthens students' understanding of community sustainability, environmental policy and regulation, the social, economic, and environmental outcomes of different land use options, climate change adaptation and mitigation, and biodiversity conservation. Students completing this specialization will acquire skills in systems thinking, impact assessment, nature-based solutions, and sustainable development. They will be well suited for jobs in community sustainability planning, conservation planning, and environmental assessment.

- Land Use, Transportation, and Infrastructure Planning Specialization - The Land Use, Transportation & Infrastructure specialization strengthens students' understanding of the relationship between land-use and transportation. Students completing this specialization will develop strong skills in systems thinking, and physical planning at a regional scale. Graduates with this Specialization would be ready to work in the transportation sector, land development industry, municipal planning, or private planning practice.

- Urban Design Specialization - Urban design prepares students to think about the physical/built form of cities and to develop creative solutions that make our communities and neighborhoods more livable, socially, and environmentally sustainable, and aesthetically appealing. Through a combination of studios,

seminars and lecture-based learning methods, students are given a foundation in urban design theories and case studies, graphic communication and visualization techniques, spatial analysis and planning methods, and sustainable design principles.

Inactivation of the Decision Support and Geographical Information Systems Specialization

The Faculty of Environment offers the Diploma in Geographic Information Systems that closely mirrors this specialization. Planning students who are interested in Geographic Information Systems will be directed to complete the diploma. Quality Assurance was consulted.

Proposed Revisions:

Current calendar text: https://ugradcalendar.uwaterloo.ca/page/ENV-Specializations-Planning

Proposed calendar text: (underlined and bolded = new, strikethrough = deletion)

Specializations for Planning

Advisors: See Faculty of Environment undergraduate advising.

School of Planning students may choose to graduate with up to two specializations.

All specializations require a minimum cumulative specialization average of 75%.

~~Decision Support and Geographic Information Systems Specialization~~

~~Geographic information systems (GIS) are used commonly by planners to manage, analyze, and visualize data related to urban planning and resource management. Students completing this specialization will have a sound grasp of the principles of GIS and the means to apply this technology effectively in research capacities and in planning practice.~~ ~~The Diploma of Excellence~~ ~~in Geographic Information Systems is not available to students graduating with this specialization~~. -

~~Successful completion requires:~~

1. ~~3.5 units distributed as follows:~~
   - ~~ENVS 278 Applied Statistics for Environmental Research~~
   - ~~PLAN 281/GEOG 281 Introduction to Geographic Information Systems (GIS)~~
   - ~~At least 2.5 units from (see additional condition):~~
     - ~~PLAN 381/GEOG 381 Advanced Geographic Information Systems~~
     - ~~PLAN 387/GEOG 387 Spatial Databases~~
     - ~~PLAN 481/GEOG 481 Geographic Information Systems Project (1.0 unit)~~

~~PLAN 487~~/~~GEOG 487 Management Issues in Geographic Information Systems~~

Environmental Planning ~~and Management~~ Specialization

~~The Environmental Planning and Management Specialization is for students intending to integrate ecology and environmental management into their career plans. It is intended for those with an urban focus as well as for students with rural, resource hinterland, or park planning interests.~~

~~Successful completion requires:~~
1. ~~3.5 units distributed as follows:~~
   - ~~ENVS 200 Field Ecology~~
   - ~~PLAN 340 Canadian Environmental Policy and Politics~~
   - ~~PLAN 341/GEOG 368 Conservation/Resource Management of the Built Environment~~
   - ~~At least 2.0 units from (see additional condition):~~
     - ~~PLAN 432/GEOG 432/HLTH 420 Health, Environment, and Planning~~
     - ~~PLAN 440 Urban Services Planning~~
     - ~~PLAN 451 Tools for Sustainable Communities~~
     - ~~PLAN 452 Policy Analysis and Program Evaluation~~
     - ~~PLAN 453/GEOG 453 Urban Stormwater Management~~
     - ~~ENVS 401 Canadian Law, Indigenous Peoples, and Natural Resource Development~~
     - ~~ENVS 433/REC 433 Ecotourism and Communities (1.0 unit)~~
     - ~~ENVS 444 Ecosystem and Resource Management in Parks/Natural Areas~~
     - ~~ENVS 469 Landscape Ecology, Restoration and Rehabilitation~~
     - ~~ERS 315 Environmental and Sustainability Assessment 2~~
     - ~~ERS 316 Urban Water and Wastewater Systems: Integrated Planning and Management~~
     - ~~ERS 382 Ecological Monitoring (1.0 unit)~~
     - ~~ERS 404/PSCI 432 Global Environmental Governance~~
     - ~~ERS 484/GEOG 404 Soil Ecosystem Dynamics~~
     - ~~GEOG 459 Energy and Sustainability (1.0 unit)~~

Successful completion requires:

1. **2.5 units distributed as follows:**
   - **PLAN 340 Canadian Environmental Policy and Politics**
   - **PLAN 451 Environmental Planning in Rural and Regional Systems**
   - **At least 1.5 units from (see additional conditions):**
     - **PLAN 358 Planning Agricultural Systems**
     - **PLAN 414 Heritage Conservation Planning**
     - **PLAN 417 Aggregate Resources Planning, Development, and Management**
     - **PLAN 440 Urban Services**
     - **PLAN 453/GEOG 453 Urban Stormwater**
     - **PLAN 480 Planning Theory and Practice Abroad**

- - **PLAN 485 Projects, Problems, and Readings in Planning**
  - **Up to 1.0 units from:**
    - - **ENVS 401 Canadian Law, Indigenous Peoples, and Natural Resource Development**
      - **ENVS 444 Ecosystem and Resource Management in Parks/Natural Areas**
      - **ENVS 469 Landscape Ecology, Restoration and Rehabilitation**
      - **ERS 316 Urban Water and Wastewater Systems: Integrated Planning and Management**
      - **ERS 372 First Nations and the Environment**

~~Land Development Planning Specialization~~ **Land Use, Transportation, and Infrastructure Planning Specialization**

~~The Land Development Planning Specialization trains planning students to develop or redevelop land in communities. Land development planners practice in complex, high-profile, and often contentious decision-making environments. To be effective practitioners in this planning context, students acquire a good working knowledge of land use planning regulations, planning law, policy, and land development issues. Graduates with this Specialization would be ready to work in the land development industry, municipal planning, or private planning practice.~~

~~Successful completion requires:~~
1. ~~5.5 units distributed as follows:~~
   - ~~PLAN 103 Planning, Administration, and Finance~~
   - ~~PLAN 233 People and Plans~~
   - ~~PLAN 261 Urban and Metropolitan Planning and Development~~
   - ~~PLAN 346 Advanced Tools for Planning: Public Participation and Mediation~~
   - ~~PLAN 401 Planners and Planning Tribunals~~
   - ~~PLAN 483 Land Development Planning~~
   - ~~ENVS 201 Introduction to Canadian Environmental Law~~
   - ~~At least 2.0 units from (see additional condition):~~
     - ~~PLAN 320/GEOG 319 Economic Analyses for Regional Planning~~
     - ~~PLAN 349/GEOG 349 Urban Form and Internal Spatial Structure~~
     - ~~PLAN 362 Regional Planning and Economic Development~~
     - ~~PLAN 450/GEOG 450 Changing Form and Structure of Metropolitan Canada~~
     - ~~PLAN 471 Planning Law~~
     - ~~PLAN 478/CIVE 440 Transit Planning and Operations~~
     - ~~PLAN 484/CIVE 484 Physical Infrastructure Planning~~

Successful completion requires:
1. **2.5 units distributed as follows:**
   - **PLAN 203 Transportation Planning and Mobility**
   - **PLAN 483 Land Development Planning**

- o **At least 1.5 units from (see additional conditions):**
  - **PLAN 320/GEOG 319 Economic Analysis for Regional Planning**
  - **PLAN 349/GEOG 349 Urban Form and Spatial Structure**
  - **PLAN 414/REC 425 Heritage Conservation Planning**
  - **PLAN 415 Urban Planning in China**
  - **PLAN 416 Modelling the City**
  - **PLAN 431 Issues in Housing**
  - **PLAN 432/GEOG 432/HLTH 420 Health and the Built Environment**
  - **PLAN 440 Urban Services**
  - **PLAN 477 Freight Planning and Policy**
  - **PLAN 478/CIVE 440 Transit Planning and Operations**
  - **PLAN 484/CIVE 484 Physical Infrastructure Planning**
  - **PLAN 480 Planning Theory and Practice Abroad**
  - **PLAN 485 Projects, Problems, and Readings in Planning**

Social Planning and Community Development Specialization

Successful completion requires:
1. **2.5 units distributed as follows:**
   - o **PLAN 233 Social Planning and Community Development**
   - o **PLAN 333 Neighbourhood and Community Planning**
   - o **At least 1.5 units from (see additional conditions):**
     - **PLAN 380 Crime and the City**
     - **PLAN 414/REC 425 Heritage Conservation Planning**
     - **PLAN 431 Issues in Housing**
     - **PLAN 432/GEOG 432/HLTH 420 Health and the Built Environment**
     - **PLAN 433 Social Issues in Planning**
     - **PLAN 441 Disabling Environments and Accessibility in Planning**
     - **PLAN 442 Indigenous Peoples and Planning**
     - **PLAN 443 Planning for Ethno-cultural Diversity and Difference**
     - **PLAN 445 Gender and Queer Inclusive Planning**
     - **PLAN 480 Planning Theory and Practice Abroad**
     - **PLAN 485 Projects, Problems, and Readings in Planning**
     - **One of:**
       - **REC 422 Urban Recreation**
       - **SDS 312R/SWREN 312R Homelessness and Public Policy**

Urban Design Specialization

~~The Urban Design Specialization acknowledges the student's competence in design and prepares them for work in~~

public and private practice. Urban design focuses on the look and feel of our communities. An urban designer might be part of creating, for example, public squares, urban streetscapes, or urban parks. This Specialization also provides a sound foundation for graduate studies in urban design.

Successful completion requires:
1. 4.0 units distributed as follows:
   - PLAN 110 Visual Approaches to Design and Communication
   - PLAN 210 Community Design Fundamentals for Planners
   - PLAN 211 Design Studio Foundations
   - PLAN 409 Urban Design Studio (1.0 unit)
   - At least 1.5 units from (see additional condition):
     - PLAN 309 Site Planning and Design Studio
     - PLAN 313 Community Design Studio (1.0 unit)
     - PLAN 408 Urban Design Seminar
     - PLAN 414/REC 425 Heritage Planning Workshop
     - PLAN 431 Issues in Housing

Successful completion requires:
1. **2.5 units distributed as follows:**
   - **PLAN 211 Design Studio Foundations**
   - **PLAN 309 Site Planning and Design Studio**
   - **PLAN 408 Urban Design Seminar**
   - **PLAN 409 Community Design Studio (1.0 unit)**

Additional condition for all specializations, **except Urban Design**:

PLAN 490 Senior Honours Essay (1.0 unit) topics - if related to the specialization - may be approved as an elective course requirement by the associate director, undergraduate studies, School of Planning.

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UNIVERSITY OF WATERLOO | Senate

Senate Undergraduate Council

For Approval   **Open Session**

To:	Senate
Sponsor:	David DeVidi Associate Vice-President, Academic
Presenter: **Contact Information:**	David DeVidi david.devidi@uwaterloo.ca
Date of Meeting:	January 29, 2024
Agenda Item Identification:	**12d. Report – Senate Undergraduate Council:** **Inactivation – Global Experience Certificate**

Recommendation/Motion:

To approve the inactivation of the Global Experience Certificate, effective 1 September 2024, as presented.

Summary:

Senate Undergraduate Council met on November 21, 2023 and agreed to forward the following item to Senate for approval as part of the regular agenda.

Jurisdictional Information:

This item is being submitted to Senate in accordance with Senate Bylaw 2, section 5.03(b): "Make recommendations to Senate with respect to new undergraduate programs/plans, the deletion of undergraduate programs/plans, and major changes to undergraduate programs/plans."

Governance Path:

Senate Undergraduate Council approval date (mm/dd/yy): 11/21/23

Background:

Since its launch in 2009, the Global Experience Certificate (GEC) has supported students seeking to become globally engaged learners. Students who have completed the GEC requirements are recognized with a certificate

presented on convocation and by listing the certificate on their transcript. Currently, the GEC requires students to complete four components:

- Three for-credit courses (1.5 units), specifically two first-year sequential language courses and one Global Studies course
- One international experience (IE) of minimum 6 consecutive weeks
- One intercultural volunteer experience (IVE) of minimum 20 hours during a single term
- One written reflection piece

Since the GEC's inception, and up to October 2023, 540 students have graduated from the program (ARTS 307; ENV 105; MATH 41; SCI 38; HEALTH 33, and ENG 16). As of August 2023, there are 89 students enrolled in the program (ARTS 48; ENG 4; ENV 17; HEALTH 7;MATH 8; SCI 5). There are only 12 international students currently enrolled in the GEC.

Highlights/Rationale:

Staff responsible for the GEC carried out a systematic assessment of the program to identify a) challenges students face to complete the certificate, and b) perceived benefits from obtaining the certificate. The findings suggest students are primarily unable to obtain a GEC due to program restraints, which are most significant for STEM students (i.e., inability to incorporate required courses), costs associated with travel, changing plans in a way that prevents them to complete a term abroad, and difficulties completing the volunteering hours within a single term. The perceived benefits of obtaining a GEC that students identified include bolstering their international experience, developing transferable skills, increasing their employability, and showcasing their achievements.

Following up on these findings, the Student Success Office's (SSO) Intercultural Learning Specialist carried out a consecutive environmental scan, literature review, and assessment of the GEC and highlighted the findings below.

- Graduation rates are low and point at a significant and continuous decrease, for instance:
    - The number of students graduating with a GEC in 2017 = 73; in 2018 = 72; in 2019 = 55.
    - Only 32 students are graduating with a GEC in 2023.

- Although there are 89 students currently enrolled in the program, new enrolment numbers continue to be low (e.g., as of August 2023, only 33 students have enrolled in the program since the beginning of the year). These numbers were negatively affected during the pandemic and have not reached pre- pandemic rates. In addition, a percentage of current students is likely to withdraw from the GEC when they face challenges to complete the requirements.

- Marketing efforts are not effective; students are able to identify benefits of participating in the GEC but are often unable to obtain it due to the barriers listed above. This makes the program inaccessible to the general student population.

Further assessment of the GEC involved collecting data from focus groups where University of Waterloo students were invited to react to a new proposed certificate: GLIDE (Global Learning and Intercultural Development Experience). Students' responses were highly positive towards the proposed offering, as it focuses on removing challenges associated with completing the GEC and offers benefits to students in addition to what they identified during the prior assessment of the GEC.

Taking into consideration the result of the internal assessment and student responses, the SSO recommend inactivating the GEC, with an effective date of September 1, 2024. After that, the SSO will offer students the opportunity to enrol in a new certificate of completion (GLIDE) that seeks to better serve students by increasing flexibility of completion and promoting inclusivity. GLIDE will be defined as a certificate of completion, and as such it will not be governed by Senate, not be listed in the Undergraduate Studies Academic Calendar, not appear on a student's record and transcript, and the certificate will be produced by the Student Success Office and not the Office of the Registrar. The SSO's Global Learning Team will administer all aspects of GLIDE and will provide students with a certificate of completion at the end, which can be highlighted on a resume.

Benefits of the new certificate of completion GLIDE would allow the SSO to:

- Foster inclusivity and offer intercultural education for all: Not all UW students are able to travel abroad to complete an international experience due to health (physical and mental), personal, socioeconomic, and program-related concerns. The new certificate will welcome, but not require, travel but will still provide graduate and undergraduate students with the opportunity to engage and learn interculturally. This also translates into further opportunities for underrepresented students to engage in guided programming and more meaningful interactions across cultures.

- Acknowledge and enhance international students' experiences: International students at UW who are interested in pursuing a GEC are required to complete an experience outside of the country even if Canada is already an international location for them. This will no longer be the case under the new certificate.

- Promote intercultural development and internationalization at home. Research shows that students involved in activities at home can develop awareness, gain knowledge, and improve their intercultural perceptions through purposeful engagement on campus and within the community with comparable and potentially heightened results. This has been considered in the development of GLIDE.

- Provide a platform supporting student communities: Domestic and international students will have greater opportunities to enhance their interactions and learn from each other through participation and reflection. This further supports efforts around understanding anti-racism and culturally constructed behaviours.

- Adhere to UW's 2020-2025 Strategic Plan: Understanding that internationalization happens in different ways and our students can benefit from participating in activities that open their minds to other perspectives; developing talent and skills through interpersonal and experiential learning; supporting sustainable learning environments while minimizing carbon footprint.

Proposed Revisions:

Inactivate the Global Experience Certificate (GEC), with an effective date of September 1, 2024.

Students who declared their intention to obtain a GEC prior to the inactivation of the GEC and wish to continue pursuing this certificate, will continue to have the GEC listed on their transcript and receive the certificate on convocation.

Inactivating the GEC will involve:

- Communication Campaign: Prior to the inactivation of the GEC on September 1, 2024, the SSO will lead a communications campaign to warn students who may not have declared their intention to obtain a GEC, but who may have an intention to pursue the certificate. Any student interested in pursuing a GEC, who applies for this certificate before September 1, 2024, will be supported as they complete the GEC requirements.

- Support for Students: On September 1, 2024, admission will be closed to any student who has not declared their intention to obtain a GEC. Students on track to obtain a GEC will be offered two options:
    a. continue with their plan to obtain a GEC; they will be supported as they complete the remaining GEC requirements, the certificate program will be listed in their transcript, and will receive the certificate on convocation.
    b. transfer to the new GLIDE certificate, count their work towards completing required components, and obtain the certificate of completion from the SSO, thus benefiting from the additional flexibility and options to obtain the GLIDE certificate.

- Undergraduate Studies Academic Calendar: The GEC will be removed from the Undergraduate Studies Academic Calendar, effective September 1, 2024. The new GLIDE certificate will be a non-calendar item.

- Office of the Registrar: The Office of the Registrar will not be responsible for producing certificates related to GLIDE; the certificate of completion will not appear on the students' transcript and will not be presented on convocation. Certificates from the Office of the Registrar would only be provided for the remaining students on track to obtain a GEC, who will still have the GEC listed on their transcript and will receive the associated certificate on convocation.

UNIVERSITY OF WATERLOO | Senate

For Approval   **Open Session**

To:	**Senate**
Sponsors:	James W.E. Rush, Vice-President, Academic and Provost
	Jeff Casello Associate Vice-President, Graduate Studies and Postdoctoral Affairs
	David DeVidi Associate Vice-President, Academic
Presenter:	David DeVidi, Associate Vice-President, Academic
Contact Information:	david.devidi@uwaterloo.ca
Date of Meeting:	January 29, 2024
Agenda Item Identification:	**13a. Report of the Provost – Revisions to Institutional Quality Assurance Process (IQAP)**

Recommendation/Motion:

That Senate approve the revisions to the Institutional Quality Assurance Process (IQAP), as presented.

Background and Summary:

The Ontario Universities Council on Quality Assurance (Quality Council/QC) recently updated its Quality Assurance Framework (QAF) which necessitated changes to each Ontario university's established institutional quality assurance process (IQAP). The following list includes the substantial changes for the University of Waterloo IQAP document:

- Links to new principles in the QAF
- Expands emphasis on continuous improvement
- Removes specific operational details to a separate document (Procedures)
- For new programs:
  - Creates flexible deadline for progress report
- Requires student consultation for major modifications
- For cyclical program reviews:
  - Requires feedback from employers/professional associations for professional programs

- o Replaces "two year progress report" with a mid-cycle report that will facilitate both a review of progress on action plans created in response to reviews and preparation for the next review
  - o Clarification of expectations on all parties for Waterloo programs with substantial AFIW involvement
- Allows virtual site visits but requires site visits to be in-person if infrastructure/facilities are critical to achieving program learning outcomes
- Requires an institutional self-study for QC audit of QA processes.

The most consequential change is the step to remove operational details to a separate Procedures document. This allows changes to processes to occur without revision to the IQAP itself. This is a significant advantage given material changes to the IQAP require approval by both the Senate and the Quality Council, while procedural changes can be implemented much more readily when it becomes clear that they are warranted. This is a substantial step forward in allowing the Office of Quality Assurance and Continuous Improvement (QACI) to apply continuous improvement principles to its own work, enabling the University to derive increasing value from the efforts required to carry out program reviews.

Some revisions reflect input from consultations carried out by the QACI Office with representatives of programs that completed cyclical reviews in 2022-23. The revisions have been previously discussed and endorsed at Deans Council, Senate Graduate and Research Council (November 20, 2023), and Senate Undergraduate Council (November 21, 2023).

In addition to the presented changes, a proposal has been endorsed by both the Senate Graduate and Research Council (SGRC), and the Senate Undergraduate Council (SUC), to recommend that Senate create a Senate Academic Quality Assurance Committee to oversee the quality assurance processes related to academic programming, instead of SGRC and SUC as the process is currently and reflected in the proposed new IQAP. Proposed terms of reference for the proposed new committee will be presented for consideration at an upcoming Senate meeting, and should it be approved, resultant editorial changes will be made to the IQAP.

Documentation Provided:

Appendix A – Proposed Revisions to the IQAP

UNIVERSITY OF WATERLOO

Institutional Quality Assurance Process (IQAP)

Approved by University of Waterloo Senate MONTH, DAY, YEAR
Ratified by the Quality Council MONTH, DAY, YEAR

Table of Contents

INTRODUCTION

In 2010, the Ontario Universities Council on Quality Assurance (Quality Council or QC) was established by the Ontario Council of Academic Vice-Presidents (OCAV), to provide oversight of a unified undergraduate and graduate quality assurance process under one framework.[1]

The Quality Assurance Framework (QAF) follows "international quality assurance standards" to "… facilitate greater international acceptance of our degrees and improve our graduates' access to university programs and employment worldwide."[2] The QAF was updated in 2020, and includes 15 principles to which the Quality Council and universities commit to follow. The QAF also summarizes Undergraduate Degree Level Expectations (UDLES) and Graduate Degree Level Expectations (GDLES) to which all academic programs must align.[3]

This Institutional Quality Assurance Process (IQAP) is consistent with the QAF.[4] Any significant changes to the IQAP are subject to approval by the University of Waterloo Senate and must be ratified by the Quality Council. Furthermore, the IQAP and associated procedures are subject to regular audit by the Quality Council to ensure that the University of Waterloo adheres to the standards of the QAF.

While consistent with the QAF, the processes described below are understood to advance additional purposes beyond quality assurance. The University of Waterloo is dedicated to the provision of outstanding academic programming. The Quality Assurance process ensures that those who lead the design and delivery of the University's programs are supported as they carry out a systematic review of their programs. The process also provides opportunities for all stakeholders – students, staff, faculty, and alumni – to provide meaningful input on a program's academics and the conditions that facilitate their delivery.

Throughout the QA process, program stakeholders are encouraged to reflect on both the strengths of their offerings as well as opportunities to improve. These reflections, when coupled with assessments from arm's-length experts, regularly affirm our programs' high quality while identifying pathways by which various aspects may be enhanced. For programs, the process results in a set of well-articulated recommended actions that help set the direction for continuous improvement of our academic programming with appropriate transparency to the University and scholarly community.

> **Commented [AC1]:** Continuous improvement (CI) in quality assurance activities is integrated throughout the IQAP. The Quality Council (QC) has an emphasis on CI.
>
> To promote CI and the sharing of best practices, the QC has implemented an "Exchange Forum" to be held during regular QC contact meetings. The Secretariat will collate the findings of each forum into an omnibus report that will be shared with the universities and posted on the Quality Council's website.

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[1] Ontario Universities Council on Quality Assurance (oucqa.ca)

[2] https://oucqa.ca/framework/quality-assurance-the-international-context/

[3] Note: Waterloo has added two UDLES to the list created by OCAV: 1) Experiential Learning; 2) Diversity.

[4] The Quality Assurance Framework will form the standard, should one not be specifically listed within this IQAP.

1.1 Authority

The University of Waterloo Senate is the final authority for ensuring the quality of all academic programs, including cyclical program reviews, new program proposals and major modifications to existing programs.

The Vice-President, Academic and Provost has responsibility for the IQAP and is the primary contact with the Quality Council. The Associate Vice-President, Academic (AVPA) and the Associate Vice-President, Graduate Studies and Postdoctoral Affairs (AVPGSPA) have delegated authority for the IQAP on behalf of the Vice-President, Academic and Provost.

Oversight of undergraduate program reviews, new undergraduate programs and major modifications to existing undergraduate programs rests with the AVPA. Responsibility for graduate program reviews, new graduate programs and major modifications to existing graduate programs rests with the AVPGSPA. Responsibility for combined (or augmented) reviews of undergraduate and graduate programs is shared between the respective portfolios.

In 2016, the Quality Assurance (QA) Office was established to support the AVPA and AVPGSPA in the oversight and monitoring of the IQAP. The QA Office is the primary contact for campus stakeholders regarding cyclical program reviews, new program proposals, and major modifications to existing programs. The Office operationalizes the IQAP and provides timely support to programs undergoing cyclical review, developing new programs and proposing academic program changes.

Detailed explanations and procedures for cyclical program reviews, new program proposals and major modifications, as well as contacts in the QA Office are listed on the Academic Program Reviews website. The information on this website constitutes the University of Waterloo's institutional manual as required by the Quality Council.

> **Commented [AM2]:** The procedures exist outside this IQAP but will be hyperlinked upon approval and implementation. Yellow highlights represent areas where links to procedures will be added.

IQAP documentation (e.g., self-studies, External Reviewers' Reports, Final Assessment Reports etc.) is retained in accordance with the University of Waterloo's institutional records retention schedule and Quality Council guidelines.

1.2 Scope of the Quality Assurance Framework

The QAF guides quality assurance processes in the following four areas:

Cyclical Reviews of Existing Programs (QAF 5)
Cyclical Program reviews are "aimed at assessing the quality of existing academic programs, identifying ongoing improvements to programs, and ensuring continuing relevance of the program to stakeholders."[5] Cyclical program reviews culminate with a Final Assessment Report (FAR) – a concise synthesis of the program's overall quality and recommendations to improve or maintain its status – submitted for evaluation and approval by Senate Undergraduate Council or Senate Graduate and Research Council and then Senate. A list of programs that underwent

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[5] Quality Assurance Framework (oucqa.ca) (2021)

cyclical review and their Final Assessment Reports are submitted annually to the Quality Council for their review.

Note: programs which have been closed or for which admission has been suspended are out of scope and will not be included in a cyclical review.

New Program Approvals & Expedited Approvals of New Programs (QAF 2)
Proposals for new degree programs and Type 2 and 3 graduate diplomas are required to follow the QAF protocol for proposing new for-credit programs. New program proposals are submitted for evaluation and approval at Senate Undergraduate Council or Senate Graduate and Research Council and then Senate. Following Senate approval, new programs are submitted to the Quality Council's Appraisal Committee for their review and approval. The Appraisal Committee has the authority to approve or decline new program proposals. In addition, new programs, where applicable, are submitted to the Ministry of Colleges and Universities (MCU) for approval of tuition rates and grant funding.

Major Modifications to Existing Programs (QAF 4)
To assure program quality of existing programs, any major substantive change made to an existing program (such that the changes are not significant enough to constitute a new program), is considered a major modification to the program. Major modifications are vetted within the program's home Faculty prior to submission to Senate Undergraduate Council or Senate Graduate and Research Council and Senate for approval. A list of major modifications is submitted annually to the Quality Council for their review.

Audit of the Institutional Quality Assurance Process (IQAP) (QAF 6)
The University of Waterloo is subject to regular audit by the Audit Committee of the Quality Council. The panel examines each institution's compliance with its own Institutional Quality Assurance Process. The audit is to be conducted every eight years and the auditor's report and subsequent institutional response is posted on the Quality Council website.

See Appendix A for a full listing of programs and levels and the sequence of approval and reporting.

As directed by the QAF (QAF), Waterloo's IQAP covers: "*… continuing undergraduate and graduate degree/diploma programs whether offered in full, in part, or conjointly by any institutions federated and affiliated with the university*."[6] This also extends "*to programs offered in partnership, collaboration or other such arrangement with other postsecondary institutions including colleges, universities, or institutes*"[6], as well as new program proposals, expedited approvals and major modifications with any of the aforementioned institutions.

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[6] Quality Assurance Framework (oucqa.ca) (2021)

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1.3 Definitions

Quality Council Definitions

The terms listed below receive specific definitions by the Quality Council, and are used in this IQAP as so defined:

- Academic Services
- Collaborative Specialization
- Course Level Outcomes[7]
- Degree
- Degree Level Expectations[8]
- Degree Program
- Diploma Program (Graduate Type 1, 2, 3)
- Emphasis, Option, Minor Program
- Expedited Approvals
- Field
- Graduate Level Course
- Inter-Institutional Program Categories (Conjoint Degree, Cotutelle, Dual Credential, Joint Degree Programs)
- Major Modification
- Micro-credential
- Mode of Delivery
- New Program
- Professional Master's Program
- Program Objectives[6]
- Program-Level Student Learning Outcomes[6]
- Program of Specialization (major, honours program, concentration or similar)

University of Waterloo Definitions

The University of Waterloo also maintains a list of commonly used terms and their definitions. In some cases, terms may be defined by both the QC and the University. In these cases, the University takes steps to ensure that these definitions while not always exactly the same, are consistent in their intentions and interpretations. Waterloo definitions can be found in the following academic calendars:

- Undergraduate Academic Calendar Glossary of Terms
- Graduate Academic Calendar Glossary of Terms

In general, Waterloo defines a **program** as a defined set of requirements or courses common to a particular degree.

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[7] Program Objectives and Program-level Learning Outcomes — Ontario Universities Council on Quality Assurance (oucqa.ca)
[8] Appendix 2: OCAV's Undergraduate and Graduate Degree Level Expectations — Ontario Universities Council on Quality Assurance (oucqa.ca)

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Commented [AC4]: This is new. The draft definition from the QC for a micro-credential is:

A designation of achievement of a coherent set of skills and knowledge, specified by a statement of purpose, learning outcomes, and strong evidence of need by industry, employers, and/or the community. They have fewer requirements and are of shorter duration than a qualification and focus on learning outcomes that are distinct from diploma/degree programs.

A micro-credential is considered a **minor modification** and is not reported to or approved by the QC. However, we had to outline later in this document how we would monitor the approval and quality of such offerings.

Commented [AC5]: New - distinguishes between these two definitions.

Program Objectives
Clear and concise statements that describe the goals of the program, however an institution defines 'program' in its IQAP. Program objectives explain the potential applications of the knowledge and skills acquired in the program; seek to help students connect learning across various contexts; situate the particular program in the context of the discipline as a whole; and are often broader in scope than the program-level learning outcomes that they help to generate.

Program-Level Student Learning Outcomes
Clear and concise statements that describe what successful students should have achieved and the knowledge, skills, and abilities that they should have acquired by the end of the program, however an institution defines 'program' in its IQAP. Program-level student learning outcomes emphasize the application and integration of knowledge – both in the context of the program and more broadly – rather than coverage of material; make explicit the expectations for student success; are measurable and thus form the criteria for assessment/evaluation; and are written in greater detail than the program objectives. Clear and concise program-level learning outcomes also help to create shared expectations between students and instructors.

2. NEW PROGRAM APPROVALS

2.1 Aims of New Program Approvals

The procedures for assessing proposals for new programs should ensure that the program:

- meets or exceeds Waterloo's expectations of academic excellence;
- is appropriately named to align with program content and to be recognizable to students, scholars and employers;
- reflects Waterloo's distinctiveness and advances the University's strategic objectives;
- is at the forefront of contemporary thinking in the discipline(s);
- is creative and innovative in its curriculum content and delivery;
- encourages interdisciplinarity as appropriate;
- has the potential to advance the University's national and global recognition;
- will attract excellent students;
- is sufficiently resourced.

2.2 What Constitutes a New Program

The QAF defines a new program as:

> "*Any degree credential (e.g., BMus, Bachelor of Integrated Studies) or degree program (within an existing degree credential), currently approved by Senate or equivalent governing body, which has not been previously approved for that institution by the Quality Council, its predecessors, or any intra-institutional approval processes that previously applied. A change of name, only, does not constitute a new program; nor does the inclusion of a new program of specialization where another with the same designation already exists (*e.g., a new honours program where a major with the same designation already exists)*.*"[9]

The QAF further clarifies that: "a 'new program' is brand -new: that is to say, the program has substantially different program objectives, program requirements and program-level learning outcomes from those of any existing approved programs offered by the institution."[10]

Examples of new programs are made available by the Quality Council.

Flow chart of QAF Overview of the New Program Approval Process

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[9] Definitions — Ontario Universities Council on Quality Assurance (oucqa.ca)
[10] Definitions — Ontario Universities Council on Quality Assurance (oucqa.ca)

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2.3 New Program Approval Process

The following are the steps included in the development of new programs, as outlined in the QAF:

1. A **Statement of Interest** is completed by the new program proponent and submitted to the QA Office (Procedures);
2. A **Program Proposal Brief** is completed by the program proponent and approved by the Provost, relevant Faculty Undergraduate/Graduate Committee(s), and Faculty Council(s) (Procedures);
3. An **External Evaluation** (QAF 2.2), including a site visit[11], is conducted by qualified, arm's length reviewers, who submit a report on their findings (Procedures);
4. A **Program Response and Dean's Response** (QAF 2.3) are submitted, summarizing the response to the External Reviewers' Report, and plans for implementing the recommendations (Procedures);
5. **Institutional Approval** (QAF 2.4), including approval at Senate Undergraduate Council or Senate Graduate and Research Council, and then Senate takes place (Procedures);
6. **Submission to the Quality Council** (QAF 2.5) occurs separately from the submission to the Ministry of Colleges and Universities, and is coordinated by the QA Office; the Appraisal Committee has the ultimate authority to approve or decline new program proposals.
7. **Submission to the Ministry of Colleges and Universities, where applicable**, occurs, separately from the submission to the Quality Council, and is coordinated by Institutional Analysis and Planning (IAP) (Procedures);
8. A **Progress Report** will monitor the implementation of the program (QAF 2.9.2). The Progress Report is internally reviewed and approved by Senate Undergraduate Council or Senate Graduate and Research Council. The report is subsequently sent to Senate for information (Procedures).

> **Commented [AC6]:** New language from the QC.

> **Commented [AC7]:** Monitoring of new programs must continue; however, the QC no longer requires a written follow up report be submitted to the QC **unless** significant additional action/ resources are required to assure the quality of the program. The QC will identify if a newly approved program requires such a report.

A high-level overview of the University's new program approval process flow chart can be found on the Academic Program Review website.

Detailed procedures for new program proposals (steps 1-8) are hyperlinked outside of the IQAP as they are subject to slight changes (i.e., changes in timelines or revisions to the names of institutions or positions, etc.); however, all procedures adhere to the standards outlined within the QAF. No substantial changes are made to the University's procedures without the approval of Senate and the Quality Council. (Note: Editorial changes, changes to deadlines, and similar minor changes do not require such approval.)

Waterloo has developed a website as well as comprehensive templates for the Statement of Interest, Program Proposal Brief (Volume I, II, III), the External Reviewers' Report, Program Response, Dean's Response, as well as the Progress Report. Programs are encouraged to contact the QA Office at any time for further clarification when developing a new program.

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[11] All programs will include an in-person site visit, where permissible by public health guidelines.

Return to Agenda

2.3.1 New Joint Programs with other Universities

The University of Waterloo partners with a number of other institutions to offer a variety of joint programs at both the undergraduate and graduate level; these joint programs result in the conferring of a single degree. Excluded from the notion of 'joint' in this context are collaborative programs connected solely at the administrative level in order to assist students to earn mutually independent degrees from each of the partner institutions (e.g., a double degree program - Bachelor of Business Administration from Wilfrid Laurier University and Bachelor of Computer Science from University of Waterloo).

The following principles shall apply to the development process of new joint programs:

- There will be a single new program proposal, which will clearly explain how input was received from faculty, staff and students at each partner institution.
- The selection of arm's length external reviewers will involve participation by each partner institution, including the appointment of an internal reviewer from each partner institution.
- The external review will involve all partner institutions and preferably all sites, if the review is held in person. Reviewers will consult faculty, staff, and students at each partner institution.
- Feedback on the reviewers' report will be solicited from participating units at each partner institution, including the deans.
- A single new program proposal package will be submitted jointly to the Quality Council by all partners.
- All partner institutions will agree on the plan to monitor the new joint program, and participate in this monitoring process.
- If the Quality Council approves a new joint program to commence "with report," each partner institution will sign off on the report before it is submitted to the Quality Council.
- Partner institutions will agree on a common review schedule for the new joint program.

For programs joint with universities outside Ontario, the quality of the program is subject to quality assurance processes in the respective jurisdictions; therefore, the review process must adhere to the procedures outlined in the QAF. It is the responsibility of the Quality Council to determine whether the out-of-province partner is subject to an appropriate quality review process in its own jurisdiction suitably comparable to the Quality Council's assurance processes.

2.3.2 Statement of Interest

The proponent of a new program, in consultation with the Dean(s) and Associate Dean(s) of the Faculty/Faculties, completes a Statement of Interest that provides an overview of the proposed program.

Once completed, the Statement of Interest is submitted to the QA Office, and reviewed and approved by the AVPA, AVPGSPA or designate. The proponent for the new program may then

begin to prepare the Proposal Brief.

2.3.3 Program Proposal Brief

A Program Proposal Brief (Volumes I, II, III) is completed in consultation with faculty, staff and students and alumni of similar programs. The Proposal Brief must follow the template provided, and address the criteria outlined in the QAF Evaluation Criteria (QAF 2.1.2).

While crafting the proposal brief, proponents are encouraged to engage internal and external stakeholders in formative conversations relative to their portfolios. As examples, proponents should seek input from their Dean on the feasibility of resources that may be necessary; Cooperative and Experiential Education (CEE) should be consulted if the new program may include work integrated learning. It is best practice to have the Proposal Brief informed by potential resource or other limitations.

A critical element in the development of a new program proposal is a financial viability analysis (FVA) conducted by Institutional Analysis and Planning (IAP). Through an FVA, the proposed program's costs – including faculty salaries, space requirements, and other resources (library, technology, etc.) – are compared to the potential revenues from student tuition and government grant. The outcome of the FVA is a report that accompanies the Brief which is then evaluated by the Faculty Dean and the Provost, who formally approves the financial elements of the program.

The completed Program Brief is submitted to the QA Office, which oversees an internal approval process that includes vetting by the AVPA, AVPGSPA or designate. The program is then submitted for approval to the relevant Faculty Undergraduate or Graduate Committee, and then Faculty Council.

2.3.4 External Evaluation

The QAF specifies new program proposals should be assessed by external academic reviewers (QAF 2.2.1) using evaluation criteria outlined in the QAF 2.1.2. In addition, the external reviewers will report on the substance of the new program proposal, comment on the adequacy of existing physical, human and financial resources; and acknowledge any clearly innovative aspects of the proposed program together with recommendations on any essential or otherwise desirable modifications to it (QAF 2.2.2)

The Review Committee (also known as the Site Visit Team) consists of two arm's length external reviewers, and an internal support person from within the institution but outside the discipline.

External reviewers will be selected on following criteria (QAF 2.2.1):

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- normally associate or full professors, or the equivalent—will have suitable disciplinary expertise,

- qualifications and program management experience, including an appreciation of pedagogy and learning outcomes

External reviewers will be nominated by the program in Volume III. The Review Committee is selected by the AVPA, AVPGSPA or designate.

The Review Committee evaluates the academic elements of the proposed program by reading the Proposal Brief (Volumes I and II - CVs) and conducting a site visit to the campus where the program will be offered. While the reviewers may identify additional resources that are of value to the proposed program, a consideration of the financial elements (revenues and expenses) of the proposed program is normally beyond the scope of their assessment. The reviewers' findings from the site visit are presented in an External Reviewers' Report, submitted to the QA Office within two weeks of the site visit. The reviewers are provided with a template for this report to ensure that the report meets the criteria outlined in QAF 2.2.1.

Once received, the report is reviewed by the QA Office and AVPA, AVPGSPA or designate to ensure proper completion. Any major issues or errors raised in the report will be addressed with the reviewers by the QA Office or AVPA/AVPGSPA, if appropriate. Any factual errors reported by the program are kept on file by the QA Office with the original report. In exceptional cases where a report does not provide value to the proposed program, a new review team may be sought, and a second site visit or desk review would supersede the original External Reviewers' Report.

The External Reviewers' Report is not public. Internally, the report is shared with the Vice-President Academic and Provost, AVPA or the AVPGSPA and Postdoctoral Affairs, Faculty Dean, Associate Deans Undergraduate or Graduate, AFIW Dean (if applicable), and the Chair/Director of the program.

Procedures for the External Evaluation

2.3.5 Program Response and Dean's Response

Separate responses from the program and the Dean are required. Representatives from the unit proposing the program review the External Reviewers' Report, write a response to each of the reviewers' recommendations, and outline plans for implementing the recommendations. The Proposal Brief is modified, as needed.

Once the QA Office receives the Program Response, it is shared with the relevant Faculty Dean and Affiliated and Federated Institutions of Waterloo (AFIW) Dean, if applicable. The Dean(s) are provided with a template to complete the Dean's Response, in which the Dean addresses the recommendations put forward by the external reviewers, and the program's response to the external reviewers' recommendations. The Dean's response should concentrate on those elements described in QAF 2.1.1.

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2.3.6 Institutional Approval

Major or significant changes to the Proposal Brief require that the proposal return through the initial approval process (i.e., Department/School, Provost, and Faculty-level approvals) prior to institutional approvals. The AVPA or AVPGSPA have final authority over whether re-approval is necessary. A new Financial Viability Assessment may also be necessary if substantive changes to resources or revenues have arisen.

The Proposal Brief (Volumes I and II), Program Response, and Dean's Response are submitted to Senate Undergraduate Council or Senate Graduate and Research Council and Senate for approval (QAF 2.4).

Procedures for Institutional Approval

2.3.7 Submission to & Response from Quality Council

Following Senate approval, the QA Office submits the Proposal Brief (Volume I), External Reviewers Report, Program Response, and Dean's Response, a brief commentary on the qualifications of faculty expertise and supervisory experience, and a submission checklist to the Quality Council Secretariat for approval by the Appraisal Committee (QAF 2.5).

> **Commented [AC8]:** These are new requirements by the QC. They no longer want to receive Volume II (CVs) just a commentary on qualifications of the faculty plus a completed submission checklist.

Once the Quality Council Secretariat acknowledges receipt of the proposal, the program may begin to advertise the program to prospective students. However, any announcements or ads must contain the following statement (QAF 2.7):

> *"Prospective students are advised that offers of admission to a new program may be made only after the university's own quality assurance processes have been completed and the Ontario Universities Council on Quality Assurance has approved the program."*

The Appraisal Committee evaluates the proposal based on (QAF 2.6.2):
- Overall sufficiency of the External Review Report(s);
- Recommendations and suggestions made by the external reviewers, including on the sufficiency and quality of the planned human, physical and financial resources;
- Adequacy of the internal responses by the unit and Dean(s) to the recommendations, or otherwise for single department Faculty; and
- Adequacy of the proposed methods for Assessment of Teaching and Learning given the proposed program's structure, objectives, program-level learning outcomes and assessment methods. (See Evaluation Criteria 2.1.2.4 a) and b))

The Appraisal Committee will then make a recommendation to the Quality Council. After considering the recommendation of the Appraisal Committee, the Quality Council will make one of the following decisions: (QAF 2.7.2):

a) Approved to commence;

b) Approved to commence, with report;
c) Deferral for up to one year during which time the university may address identified issues and report back; or
d) Not approved.

The Quality Assurance Secretariat will convey the decision of the Quality Council to the University. Then the QA Office notifies the program proponent/department/school of the Quality Council's official decision.

A decision of "approved to commence with report" is given when significant additional action, such as a large number of new hires and/or other new resources, are required to assure the quality of the program (QAF 2.6.3). The preparation of the report is the responsibility of the program, in consultation with the dean or deans of the faculties in which the required actions will be implemented. Approval of the report will be the responsibility of the Vice-President, Academic or their delegate. The QA Office will notify the program when their report is due and will review and submit it to the Quality Council on their behalf.

Universities may consult/appeal a decision of b), c), or d) from the Appraisal Committee within 30 days (QAF 2.7.2). Should the result of this reconsideration be unsatisfactory, the University can appeal the Appraisal Committee's final recommendation to the Quality Council (QAF 2.7.2).

Programs will be notified by the Quality Assurance Office as to when they can begin to make offers of admission. Programs may only make offers of admission to new students once the Quality Council and the University have posted the approval of the new program and a brief description of the program on their websites.

> **Commented [AC9]:** New: Waterloo will start posting new programs and their description on the Academic Program Reviews/Quality Assurance website.

After a new program is approved to commence, the program launches with its first student intake within 36 months of the date of approval (QAF 2.9.1) otherwise, the approval will lapse. The new program enters into the cyclical program review cycle, with the first review taking place no later than eight years following the first intake of students (QAF 2.9.3).

New undergraduate and/or graduate programs that have been approved within the period since the previous Audit are eligible for selection for the University's next Cyclical Audit. Note: an audit cannot reverse the approval of a program to commence.

> **Commented [AC10]:** This is new language added by the QC.

Procedures for Approval by Quality Council

2.3.8 Submission to & Response from the Ministry

Once the proposal has been submitted to the Quality Council, IAP submits a program proposal to the Ministry of Colleges and Universities (MCU) for approval of proposed tuition and grant weight. Once MCU approval is confirmed, IAP notifies the department/school and applicable university personnel.

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2.3.9 Progress Report

A Progress Report is prepared by the program's Chair or Director, submitted to the QA Office and reviewed and approved by the AVPA or AVPGSPA. The submission deadline for the Progress Report is determined on a case-by-case basis but is required no later than 48 months after the program's first student intake. This report satisfies the QAF requirement to ensure the monitoring of new programs (QAF 2.9.2). The purpose of the report is to provide initial data on student progress and implementation of the program, to respond to recommendations and any issues raised in the External Reviewers' Report, and to highlight any additional areas to be considered in the first cyclical review of the new program. In addition, this report will carefully evaluate the program's success in realizing its objectives, requirements, and outcomes, as originally proposed and approved, and any changes that have occurred in the interim, including in response to any Note(s) from the Appraisal Committee.

The Progress Report is internally reviewed and approved by Senate Undergraduate Council or Senate Graduate and Research Council, and subsequently sent to Senate for information. This report is not subject to Quality Council reporting, unless the program received 'approval to commence, with report' (QAF 2.6.3).

Procedures for the Progress Report

Commented [AC11]: he QC no longer requires a written follow up report **unless** significant additional action/ resources are required to assure the quality of the program. This is referred to as "*Approval to commence, with report*".

"The *with report* condition implies no lack of quality in the program at this point, importantly does not hold up the implementation of the new program, and is not subject to public reference on the Quality Council's website. **The requirement for a report is typically the result of a provision or facility not currently in place but considered essential for a successful program and planned for later implementation.**" (QAF, page 22)

We have adjusted the deadline for progress reports which will be determined on a case-by-case basis and will depend on the program's commitments and the recommendations by external reviewers.

3. EXPEDITED APPROVALS OF NEW PROGRAMS

Proposals for new for-credit Type 2 and 3 graduate diplomas (GDip), as well as, new standalone degree programs arising from a long-standing field in a master's or doctoral program that has undergone at least two Cyclical Program Reviews and has at least two graduating cohorts, follow an expedited approval process (QAF 3).

These proposals have the same required steps as a New Program Proposal with the exception of the external evaluation and subsequent responses. New graduate diplomas are required to submit a Proposal Brief that addresses the relevant QAF Evaluation Criteria (QAF 2.1.2).

The Quality Council's Appraisal Committee conducts an appraisal and will then make a recommendation to the Quality Council. After considering the recommendation of the Appraisal Committee, the Quality Council will make one of the following decisions: (QAF 3.2):

   a) Approved to commence;
   b) Approved to commence, with report;
   c) Not approved.

The Quality Assurance Secretariat will convey the decision of the Appraisal Committee to the Quality Council for information, and then to the University. The QA Office notifies the program proponent of the Quality Council's official decision (QAF 3.2).

A decision of "approved to commence with report" will only be required when significant additional action, such as a large number of new hires and/or other new resources, are required to assure the quality of the program (QAF 2.6.3). The QA Office will notify the program when their report is due and will review and submit it to the Quality Council on their behalf.

The University may appeal a decision of b) or c) using the same process for new program appeals in the QAF 2.7.1 to 2.7.4.

The expedited approval process *may* also be used if the institution requests Quality Council endorsement of a graduate field, or if the institution requests an expedited approval for a major modification to an existing program. However, Waterloo has rarely used this process for graduate fields or major modifications. Note: programs created or modified through the Protocol for Expedited Approvals are not normally subject to the institution's Cyclical Audit.

An approved GDip should be added to the Cyclical Program Review Schedule, for review alongside its "parent" program, where one exists. In the absence of an existing "parent" master's or doctoral degree program, best practice would be to have the proposed GDip externally reviewed by desk review or equivalent method.

Flow chart of QAF Overview of the Expedited Approval Process

Procedures for Expedited Approvals of New Programs

Commented [AC12]: New language from the QC.

Type 1 GDips are now handled as major modifications (as are collaborative programs/specializations – this was changed back in 2016).

Added option of the creation of a new standalone degree from an existing field in a graduate program, with associated criteria, to go through the Protocol for Expedited Approval.

Commented [AC13]: New language

Commented [AC14]: This is new. Waterloo has not undertaken desk reviews in the past. Details have been added to the "Procedures" section.

3.1 Proposals for New Undergraduate Minors, Options, Specializations, Certificates and Diplomas

Proposals for a new for-credit undergraduate minors, options, specializations, certificates, or diplomas require, at minimum, Faculty-level approval, Senate Undergraduate Council and Senate approval (Appendix A).

New for-credit undergraduate diplomas are considered major modifications and are subject to the approval process for major modifications (see Section 4). Proposals for new for-credit undergraduate diplomas may be subject to approval by the Ministry of Colleges and Universities for tuition and grant funding. Please consult Institutional Analysis and Planning.

Not-for-credit and for-credit undergraduate or post-graduate diploma programs are not subject to approval or audit by the Quality Council.

4. MAJOR MODIFICATIONS TO EXISTING PROGRAMS

4.1 Definition of a Major Modification

Major modifications are made by institutions in order to (QAF 4):

- Implement the outcomes of a cyclical program review;
- Reflect the ongoing evolution of the discipline;
- Accommodate new developments in a particular field;
- Facilitate improvements in teaching and learning strategies;
- Respond to the changing needs of students, society, and industry; and/or
- Respond to improvements in technology.

Such modifications provide an opportunity for continuous improvement, improving the student experience and staying current with the discipline.

According to the QAF, the purpose of identifying major modification to existing programs is to ensure "their approval through a robust quality assurance process" and to "assure stakeholders, including the university, students, the public, and the government of the ongoing quality of the institution's academic programs."[12]

A major modification is defined as one or more of the following program changes (QAF 4):

- Requirements that differ significantly from those existing at the time of the previous cyclical program review;

- Significant changes to the program-level learning outcomes that do not, however, meet the threshold of a new program;

- Significant changes to the program's delivery, including to the program's faculty and/or to the essential physical resources as may occur, for example, where there have been changes to the existing mode(s) of delivery (e.g., different campus and/or online/hybrid delivery – see below);

- Change in program name and/or degree nomenclature, when this results in a change in learning outcomes; and/or

- Addition of a single new field to an existing graduate program. Note that universities are not required to declare fields for either master's or doctoral programs. Also note that the creation of more than one field at one point in time or over subsequent years may need to go through the Expedited Protocol.

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[12] Quality Assurance Framework (oucqa.ca) (2021)

Waterloo defines a *significant change* as revisions or additions (i.e., major modifications) that substantially impact a program. For example, changing *up to* one third of the courses or requirements to a program. Changes that impact *more* than a third of courses or requirements may be considered a new program. The AVPA or AVPSGA will make the decision as to whether the changes constitute a new program, requiring the initiation of the new program protocol.

When changing the mode of delivery of a program to online for all or a significant portion of a program that was previously delivered in-person, consider the following criteria:

- Maintenance of and/or changes to the program objectives and program-level learning outcomes;
- Adequacy of the technological platform and tools;
- Sufficiency of support services and training for teaching staff;
- Sufficiency and type of support for students in the new learning environment; and
- Access.

All major modifications to existing programs require internal approvals. Changes that impact collaborations with other courses, programs, departments/schools and Faculties require consultation in advance of bringing the change forward for approval. IAP must be consulted as some major modifications can impact tuition and grant funding from the Ministry.

In addition, academic support units such as Centre for Teaching Excellence (CTE), Co-operative and Experiential Education (CEE), and the Library must be consulted to assess any impact of the proposed changes.

Furthermore, an assessment of the impact of the proposed modification will have on the program's students, and input from current students and recent graduates of the program must be included in the documented rationale for the major modification. Specifically, including a statement on the way in which the proposed major modification will improve the student experience.

> **Commented [AC15]:** This is a new requirement for all major modifications.

In such cases where a submission of a major modification to the Quality Council is for expedited approval, the submitted Proposal requires:
- Description of, and rationale for, the proposed changes; and
- Application of the relevant criteria, as outlined in Framework Section 2.1.2, to the proposed changes. The University will determine which criteria are deemed relevant for each Proposal and, to meet their own needs and in recognition of the diversity in institutional strategies, institutions may include their own quality assurance requirements, including for example, consideration of equity, diversity and inclusion, special missions and mandates, and student populations that are being encouraged by governments, institutions, and others.

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Any program closure will be considered a major modification and will follow the approval process listed below. The internal approval process will ensure that the proposed modification is in alignment with the relevant program-level learning outcomes.

Major modifications are approved initially at the department/school level and Faculty level (including relevant Faculty Undergraduate or Graduate Committee, and Faculty Council). Subsequently, the major modification is approved at Senate Undergraduate Council or Senate Graduate and Research Council and, finally, by Senate. Major modifications are not subject to Quality Council approval; however, all major modifications are submitted and subject to review by the Quality Council on an annual basis (QAF 4.3). The Quality Council has the final authority to decide if a major modification constitutes a new program and, therefore, must follow the Protocol for New Program Approvals. Note: major modifications are not normally subject to the institution's Cyclical Audit.

Level of approval and reporting for major modifications is listed in Appendix A.

If there is uncertainty as to whether a particular change is major/significant or minor, the program should contact the QA Office. The AVPA or AVPGSPA will be the final arbiter for decisions with regards to major modifications for undergraduate and graduate programs, respectively.

Procedures for Major Modifications

4.2 Minor Modifications

Modifications that do not meet the threshold of a major modification are considered to be minor. These would minimally include: changes to an existing Emphasis, Option, or Minor Program; the creation of a new micro-credential(s); undergraduate certificate(s); and laddering, stacking or similar options or comparable elements. While these modifications do not need Quality Council appraisal and approval, the QC requires that the University of Waterloo detail how the changes will be made and the quality of such changes will be assured.

Minor modifications to academic programs for credit (e.g., Emphasis, Specialization, Option, or Minor, undergraduate certificate(s) or comparable elements) are approved at the department/school level, Faculty level (including relevant Faculty Undergraduate or Graduate Committee, and Faculty Council), and then subsequently approved at Senate Undergraduate Council or Senate Graduate and Research Council. Undergraduate Council or Senate Graduate and Research Council are empowered to approve minor changes on behalf of Senate, as per Senate Bylaw 2.

Minor modifications for non-credit or alternative credentials offerings such as micro-credential(s), laddering, stacking or similar options, or comparable elements, are approved by an Alternative Credentials Approval Committee which is chaired by the AVPA. New offerings are submitted to this Committee for review and approval using a standardized template. The template requires that the offerings detail how they will solicit feedback from participants and provide a timeframe for ongoing evaluation. The Committee will review the report to assess indicators of

Commented [AC16]: New inclusion from the QC.

Commented [AC17]: This is new.

Commented [AC18]: This is new from the QC.

the quality of the offering and will recommend steps taken to address any problems that are identified.

Minor modifications are not subject to Quality Council review or reporting. Level of approval and reporting for minor modifications is listed in Appendix A.

Procedures for Minor Modifications

Commented [AC19]: The QC required that we explain how these offerings will be approved and their quality assured.

Note: The wording here is deliberately left a bit loose as ACAC is a relatively new committee and its processes are evolving.

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5. CYCLICAL REVIEWS OF EXISTING PROGRAMS

5.1 Purpose of Cyclical Reviews

Cyclical reviews of academic programs are conducted to:

- help each program achieve and maintain the highest possible standards of academic excellence, through systematically reflecting on its strengths and weaknesses, and look forward to determine what actions would further enhance quality in the program;
- assess the quality of the program relative to counterpart programs in Ontario, Canada and internationally;
- meet public accountability expectations through a credible, transparent, and action-oriented review process;
- create an institutional culture that values continuous improvement, while recognizing the significant workload implications such proactive steps require.

A key outcome from a Cyclical Review is the Final Assessment Report which forms the basis of a continuous improvement process that monitors the recommendations in the Implementation Plan.

Given its commitment to continuous improvement and excellence in academic programs, the University of Waterloo also reviews undergraduate diplomas, minors, options, and specializations, which exceeds the requirements of the QAF. Offerings such as participation certifications and language diplomas are excluded from a cyclical review.

Academic programs are typically, but not always, associated with an academic department. In cases where program administration spans multiple academic units, provisions are made to review these offerings (joint programs and multi- or inter-disciplinary programs) in a way that is appropriate for the University. Faculty-based programs – those administered through the Faculty Dean's Office – follow the same process as their counterparts housed in traditional academic departments/schools.

Waterloo encourages combined or 'augmented' reviews (i.e., where related undergraduate and graduate are reviewed concurrently) where feasible as such reviews tend to be more efficient. More importantly, augmented reviews often have academic merit, as there are typically interactions between the undergraduate and graduate programs, so benefits of the program review process are greater when the programs are considered together.

Note: regardless of the "bundling" of program reviews, the quality of each academic program and the learning environment of the students in each program will be explicitly addressed in the self-study and the external reviewers' report.

5.2 Frequency of Reviews

Waterloo's cyclical program reviews are generally scheduled to take place every seven years.

According to the QAF, program reviews must be reviewed in a cycle not to exceed eight years (QAF 5.1.1). To achieve alignment between the timing of reviews of undergraduate and graduate programs, the scheduling of the review can be adjusted, with approval from the AVPA or AVPGSPA, but the interval between reviews shall not exceed eight years. Failure to complete the review within the eight-year timeline would put the University of Waterloo out of compliance with the QAF. Every effort is made at all levels of the University to adhere to the QAF timelines.

The program review schedule is posted on the Academic Program Review website and is updated annually. Note: programs which have been closed or for which admission has been suspended are out of scope. The review schedule includes all program offerings, including those that are joint/inter-institutional, multi-disciplinary, interdisciplinary or at multiple sites. The Schedule will also include all modes of program delivery and can reflect independent or concurrent review of a university's undergraduate and graduate programs, and/or with other departments and academic units.

Flow chart of QAF Overview of Cyclical Program Review Process

5.3 Cyclical Program Review Process

The cyclical review process typically takes up to 18 months to complete. There are five components to complete the cyclical program review, as outlined in the QAF:

1. The **self-study** (QAF 5.1.3) is prepared by faculty and staff with input from faculty, students and alumni of the program. Professional programs must also seek feedback from employers and/or professional associations. (Procedures);
2. An **external evaluation** (QAF 5.2.1), including a site visit[13], is conducted by qualified, arm's length reviewers, who submit a report on their findings (Procedures);
3. The **Program Response, Implementation Plan & Dean's Response** (QAF 5.3.2) are submitted, summarizing the response to the External Reviewers' Report and plans for implementing the recommendations (Procedures);
4. A **Final Assessment Report (FAR)** (QAF 5.3.2), which is a synopsis of the self-study, reviewers' recommendations, Program and Dean's Responses, and the Implementation Plan, is prepared by the QA Office (Procedures);
5. **Approval and Reporting** (QAF 5.4.1, 5.4.2) requires that the FAR is reviewed by the AVPA or AVPGSPA, then the Program Chair or Director and the Dean for factual corrections. The FAR is then reviewed and approved by Senate Undergraduate Council or Senate Graduate and Research Council (note: these bodies have delegated authority to approve such items on behalf of Senate), and then sent to Senate for information. Upon Senate approval, the FAR is sent to the Program Chair or Director, Dean and Associate Dean and is posted publicly on the University's website. The FARs are submitted annually to the Quality Council (Procedures)

In order to ensure that the full quality improvement value of the cyclical review process is

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[13] All programs will include an in-person site visit, where permissible by public health guidelines.

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Commented [AC20]: This is new.

Commented [AC21]: This is new.

Commented [AC22]: his is new and seen as a formal transfer of accountability to the Program and Dean to follow through with the actions laid out in the recommendations and Implementation Plan.

attained, the University of Waterloo has monitoring and reporting steps as required in the QAF 5.4.1:

6. The **Progress Report** provides an update on progress made on the Implementation Plan. The Report is reviewed and approved by Senate Undergraduate Council or Senate Graduate and Research Council, as appropriate, then sent to Senate for information, whereupon it is posted on the University's website. This report is not subject to QC reporting (<mark>Procedures</mark>);

Detailed procedures for cyclical program reviews (steps 1-7) are hyperlinked outside of the IQAP as they are subject to slight changes (i.e., changes in timelines or revisions to the names of institutions or positions, etc.); however, all procedures adhere to the standards outlined within the QAF. Any substantial changes made to these procedures requires the approval of Senate and the Quality Council. Note: Editorial changes, changes to deadlines, and similar minor changes are not subject to such approval.

The QA Office maintains the Academic Program Reviews website which includes resources for those involved in any stage of the cyclical review process, including comprehensive templates for the self-study (Volume I, II, III), External Reviewers' Report, Program Response and Implementation Plan, Dean's Response, and Final Assessment Report (FAR), as well as the Two-Year and Five-Year Progress Reports. Programs are encouraged to contact the QA Office at any time for further clarification on matters pertaining to their cyclical program review.

5.3.1 Self-Study

As per Waterloo's schedule of cyclical program reviews, the QA Office, on behalf of the AVPA or AVPGSPA, notifies the Chair/Director of the program of the upcoming review approximately a year in advance of the deadline for submission of the self-study. The programs and any associated "bundling" of programs are denoted in the program review schedule and distinct versions of each program must be identified at the beginning of the process, including the various delivery modes and sites.

An orientation presentation is organized by the QA Office, which covers the nature of the review process, an overview of the self-study template and the associated timelines. The preparation of the self-study, consisting of three volumes of documentation (Volume I, II, III), has typically required 8-10 months. This duration is a result of the need for meaningful consultation with stakeholders including faculty, students, staff and alumni, as well as feedback on professional programs from employers and/or professional associations; receipt of partners' contributions (e.g., cooperative education, library, and others); the gathering of faculty data including access to up-to-date CVs; and the allocation of time for program leaders to engage in a broad-based, reflective, forward-looking and critical analysis.

> **Commented [AC23]:** Expanded consultation required.

Each program receives a self-study (Volume I) template pre-populated with numerical data relevant to their program(s). These data quantify critical program attributes – student demand, enrollments, and retention; faculty teaching and students' perceptions of quality; research output and funding; and composition of the program's faculty and staff. The intention of providing these data is to allow

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the program to interpret the quantitative representation in ways that advance the goals of the review – identifying strengths and opportunities for enhancement.

Data for the self-study are provided primarily by IAP, reflecting centrally compiled institutional data, and ensuring consistency and integrity in definitions, sources and dates. These data are for internal uses and not publicly available. In cases where programs have concerns with the data that are provided, opportunities exist in the self-study process to verify the validity of these data with IAP, the QA Office, and other sources.

The cyclical review covers the seven previous fiscal years (spring/fall/winter), with emphasis on the most recent years.

The structure and content of the self-study follow the requirements of the QAF (QAF 5.1.3.). Programs and ultimately external reviewers are required to articulate and evaluate:

- consistency of the program's learning outcomes with the institution's mission and Degree Level Expectations, and how graduates achieve those outcomes;
- program-related data and measures of performance, including applicable provincial, national and professional standards (where available);
- integrity of the data;
- evaluation criteria and quality indicators (QAF 5.1.3.1);
- Identify any unique curriculum or program innovations, creative components, or significant high impact practices;
- concerns and recommendations raised in previous reviews (including items flagged for monitoring or follow-up with the QC for new programs undergoing their first cyclical review);
- areas identified through the self-study as requiring improvement;
- areas identified as holding potential for enhancement and/or opportunities for curricular change as identified by the program's faculty, staff and/or students;
- academic services that directly contribute to the academic quality of each program under review;
- participation of program faculty,[14] staff, students, and alumni in the self-study

The completed self-study is subject to review and approval of the AVPA, AVPGSPA or designate.

All documentation associated with the self-study is confidential and not publicly available.

Procedures for Completing the Self-Study

5.3.2 External Evaluation

The QAF specifies that the review of existing programs should be assessed by external academic reviewers guided by QAF 5.2 using the QAF's evaluation criteria in QAF 5.1.3.1. The Review

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[14] Faculty who regularly teach in the program, and faculty from the Affiliated and Federated Institutions of Waterloo (AFIW) are to be consulted.

Committee consists of two external reviewers who are arm's length from the program under review, one from inside and one from outside the Province of Ontario, and an internal support person, as needed, from within the institution, but outside the program/discipline.

External reviewers will be selected on following criteria (QAF 5.2.1):

- normally associate or full professors, or the equivalent—will have suitable disciplinary expertise,

- qualifications and program management experience, including an appreciation of pedagogy and learning outcomes

External reviewers (including employers and/or professional associations related to professional programs) are nominated by the program in Volume III. From the full list of nominees, the Review Committee (also known as the Site Visit Team) will be selected, as appropriate, by the AVPA, AVPGSPA or designate. The criteria for selection of the reviewers include at minimum associate or full professor level, previous administrative leadership, evidence of current research and teaching, and similarity of the externals' academic discipline to the program(s) being reviewed. External reviewers for professional programs will be selected based on length and quality of expertise in industry or profession as well as current level of activity in the field.

The Review Committee will evaluate the program by reading the self-study and Volume II (CVs) and conducting a site visit. During the site visit, the AVPA, AVPGSPA or designate ensure the reviewers understand their role and respect the confidentiality of the review process. During the site visit, the reviewers meet with faculty, staff, students, and administrators connected to the program(s) under review and view related facilities.

The reviewers are provided with an External Reviewers' Report template that includes the criteria outlined in the QAF 5.2.1. Reviewers are instructed to present their findings from the site visit in one joint report using the External Reviewers' template and submit it to the QA Office. Reviewers are asked to identify and commend the notably strong and creative attributes of each discrete program documented in the self-study, as well as, each discrete program's respective strengths, areas for improvement, and opportunities for enhancement. In addition, reviewers are asked to provide evidence of any significant innovation or creativity in the content and/or delivery of the program relative to other such programs. This report must include a minimum of three recommendations for specific steps to be taken that will lead to the continuous improvement of the program, distinguishing between those the program can itself take and those that require external action. Reviewers must articulate and demonstrate the value of any suggested additional resources, such as faculty complement and/or space requirements, and how these are directly tied to issues of program quality or sustainability. The QA Office requests to receive this report within two weeks of the site visit.

Once received, the report is reviewed by the QA Office and AVPA, AVPGSPA or designate to ensure proper completion. Any major issues or errors identified in this review are addressed with the reviewers by the QA Office, and AVPA or AVPGSPA, if appropriate. Any factual errors reported by the

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program are kept on file by the QA Office with the original report. In the unlikely case where a report does not provide sufficient value to the program under review, a new Review Committee may be sought, and a second site visit or desk review conducted which would supersede the original External Reviewers' Report.

The External Reviewers' Report is not publicly available. The document is shared internally with the Vice-President Academic and Provost, AVPA or AVPGSPA, Faculty Dean(s), Associate Deans Undergraduate or Graduate, AFIW Dean (if applicable), and the Chair/Director of the program.

==Procedures for the External Evaluation==

5.3.3 Program Response, Implementation Plan and Dean's Response

Representatives from the program, typically those responsible for the development of the self-study, review the External Reviewers' Report and write a response to each of the reviewers' recommendations using a template provided by the QA Office. The program also drafts a plan for the implementation of the recommendations and prioritizes recommendations selected for action. Once the QA Office receives the Program Response and Implementation Plan, the documents are shared with the relevant Faculty Dean(s) and, if applicable, AFIW Dean. The Dean(s) is provided with a template to complete the Dean's Response.

In their response, the Dean reflects upon the actions the program proposed in their self-study report, the recommendations put forward by the external reviewers, and the program's response to the external reviewers' recommendations and their Implementation Plan. The Dean is asked to comment specifically on the consistency and alignment of the program's intended actions with Faculty- and University-level priorities. Moreover, the Dean addresses any Faculty resource implications that may be necessary for the program to respond effectively to the recommendations.

Naturally (and appropriately), there may be instances where the program's and Dean's assessments of future pathways may not be entirely aligned. In such cases, these stakeholders are encouraged to address any differences. Collectively, the Program Response and the Dean's Response should provide clarity to the program, the Faculty, and the University on:

- what actions will follow from specific recommendations and prioritizes recommendations selected for action;
- any changes in organization, policy or governance that would be necessary to follow the recommendations;
- resources – financial or otherwise – required to support the implementation of selected recommendations;
- who will be responsible for providing resources;
- a proposed timeline and responsibility for oversight for implementation of any of those recommendations; and
- priorities for implementation and realistic timelines for initiating and monitoring actions.

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The details, most of which are verbatim, from the Program Response, Implementation Plan, and Dean's Response are used by the QA Office to prepare the Final Assessment Report (FAR); however, the Program Response and Dean's Response documents are not publicly available.

<mark>**Procedures for Completing the Program Response, Implementation Plan and Dean's Response**</mark>

5.3.4 Final Assessment Report

The Final Assessment Report (FAR) is the key outcome of a cyclical review and forms the basis of a continuous improvement process that monitors the recommendations in the Implementation Plan. The QA Office prepares the FAR and it is reviewed by the AVPA or AVPGSPA. The FAR is a synopsis of the entire cyclical review and is based on information extracted, in many cases verbatim, from the self-study, External Reviewers' Report, Program Response and Dean's Response. The FAR identifies strengths of the program, opportunities for program enhancement, and sets out an implementation plan for all of the external reviewer's recommendations (except, where an approved rationale is provided for not including a specific recommendation(s)). Furthermore, any additional recommendations that the program/unit, the Dean(s) and/or the University may have identified as requiring action as a result of the program's review will be included in the FAR.

The FAR includes an Executive Summary, and Implementation Plan, which outlines who is responsible for providing resources for the recommendations, who is responsible for acting on the recommendations, and timelines for acting on and monitoring the implementation of the recommendations (QAF 5.3.2). The Final Assessment Report will not include any confidential information.

<mark>**Procedures for Completing the Final Assessment Report (FAR)**</mark>

5.3.5 Approval and Reporting

After the FAR and associated Implementation Plan are reviewed by the AVPA or AVPGSPA, they are shared with the Program Chair or Director and the Dean for review of any factual corrections. Before they go to Senate for information they are reviewed and approved by members of Senate Undergraduate Council or Senate Graduate and Research Council (note: these bodies have delegated authority to approve such items on behalf of Senate). Once through Senate, they are sent to the Program Chair or Director for them to "own" and act on, as appropriate, and are posted publicly on the Academic Program Reviews website and the website of any affiliated institution. Programs are also encouraged to post the FAR and associated Implementation Plan on their own websites. The FARs, including the Implementation Plans, are submitted annually to the Quality Council and to the Board of Governors. The annual report and related Cyclical Program Review processes will occasionally be reviewed for compliance by the Quality Council and, if issues are found, the Quality Council may decide to initiate a Focused Audit (see Section 6).

> **Commented [AC28]:** A new requirement from the QC.

> **Commented [AC29]:** New.

> **Commented [AC30]:** Also new.
> A Focused Audit is a mini-audit added to closely examine a specific aspect(s) of the university's QA practices/processes arising from causes for concern from a Cyclical Program Review or triggered by other QA concerns of a systemic nature.

<mark>**Procedures for Approval and Reporting**</mark>

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5.3.6 *Progress Report*

The Program Chair or Director is responsible for the preparation and submission of a Progress Report, submitted approximately four years after the start of each cyclical review. In this report, programs are asked to outline their progress on their Implementation Plan from their last program review. This report is an opportunity for the program to explain any circumstances that have altered the original implementation plan, address any significant developments or initiatives that have arisen since the program review process or that were not contemplated during the review, and report on anything else the Program Chair or Director believes is appropriate to bring to Senate concerning the program.

The progress report is reviewed by the AVPA or AVPGSPA, and subsequently approved by Senate Undergraduate Council or Senate Graduate and Research Council. Finally, the progress report is sent to Senate for information and posted publicly on the Academic Program Reviews website.

Procedures for Completing the Progress Report

5.4 Programs at Federated or Affiliated Institutions

The University of Waterloo has one federated university (St. Jerome's University) and three affiliated university colleges (Conrad Grebel University College, Renison University College, United College). All academic programs offered completely by, or in conjunction with, these Affiliated and Federated Institutions of Waterloo (AFIW) fall under the purview of the University of Waterloo's IQAP and follow the same quality assurance process and standards as other programs offered by the University of Waterloo. When a program is primarily based within one of the AFIW, the lead role for the program review is taken by the relevant institution.

For a number of Waterloo programs, a substantial contribution is made to program delivery by one or more of the AFIW, and in a few cases there is a parallel unit to the Waterloo department primarily responsible for the delivery of the program. Success in such situations is facilitated by active cooperation and communication between the units involved, and it is expected that such units will use the review process as an opportunity to explore ways in which the program(s) under review can be strengthened. In such cases the following principles should apply:

- the Waterloo department in which the program is housed will be primarily responsible for preparation of the self-study, for hosting site visitors, and for responding to recommendations;
- the self-study should accurately reflect the role of the AFIW in the delivery of the program;
- the Waterloo unit is responsible for ensuring that there is meaningful consultation with the AFIW units (or where there is no unit, colleagues who are involved in the delivery of the program to a considerable degree) during the preparation of the self-study and the response to recommendations;

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- in cases where implementing recommendations may require changes to processes and practices not only with the Waterloo units but within the AFIW as well, program and Deans' responses to the recommendations should clearly indicate what steps will be taken in each institution. If a recommendation is to be acted on in one unit but not another, a rationale should be provided.

Commented [AC32]: Clarification of expectations for programs with AFIW involvement.

Conversely, for programs whose delivery is primarily the responsibility of a unit within one or more AFIW, appropriate involvement of relevant Waterloo departments or colleagues in the preparation of self-studies and response to recommendations is required.

The Affiliated and Federated Institutions of Waterloo may opt to have their program reviews considered at their own councils, in parallel to their review and approval at Senate Undergraduate Council or Senate Graduate and Research Council. The Final Assessment Reports (FARs) and Progress Reports for AFIW-based programs will be centrally posted on the Academic Program Reviews website as well as on the AFIW's own website.

5.5 Programs Joint with other Universities

The University of Waterloo partners with a number of other institutions to offer a variety of joint programs at both the undergraduate and graduate level; these joint programs result in the conferring of a single degree. Excluded from the notion of 'joint' in this context are collaborative programs connected solely at the administrative level in order to assist students to earn mutually independent degrees from each of the partner institutions (e.g., a double degree program - Bachelor of Business Administration from Wilfrid Laurier University and Bachelor of Computer Science from University of Waterloo).

Procedures for joint programs with other universities

In the case of joint programs with other postsecondary institutions in Ontario, the participating institutions will agree on a common review schedule. Cyclical reviews will be conducted according to the IQAP of the institution administering the review (usually the institution at which the current director holds appointment) and under the leadership of that institution's program director. For purposes of consistency, the institution that holds directorship of the joint program at the beginning of the cyclical review will be responsible for leading the process through to the completion of the Final Assessment Report, Implementation Plan, and the Progress Report.

For programs joint with universities outside Ontario, the quality of the program is subject to quality assurance processes in the respective jurisdictions; therefore, the review process must adhere to the procedures outlined in the QAF. It is the responsibility of the Quality Council to determine whether the out-of-province partner is subject to an appropriate quality review process in its own jurisdiction suitably comparable to the Quality Council's assurance processes. Waterloo includes information in the self-study relevant to the out-of-province offering. The review may not necessarily require a site visit to the other institution; however, the program includes information that would normally be gained during a site visit about the components of

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the program completed outside Ontario (e.g., video, photos, floor plans, etc.).

5.6 Accredited Programs

Beyond the Quality Assurance process, many academic programs are evaluated and accredited by organizations in their disciplines. Examples at the University of Waterloo include Engineering programs that are accredited by CEAB while the School of Planning is accredited at the Provincial and Federal levels. It is important to understand the similarities and differences between accreditation processes and the Institutional Quality Assurance Process.

According to the Quality Council, accreditation is described as "a process by which a program or institution is evaluated to determine if it meets certain pre-determined minimal criteria or standards." Quality assurance, on the other hand, is described as "as on-going and continuous evaluation for the purpose of quality improvement. Quality assurance processes include assessing, monitoring, guaranteeing, maintaining and improving."[15] Inherently, accreditation typically asks if a program is meeting the minimum requirements to ensure graduates have necessary attributes to engage professionally. The IQAP process, as articulated throughout this document, concentrates on continuous improvement with systematic, transparent monitoring by (internal) stakeholders.

Despite the differences in objectives, these two processes have overlapping elements. To support programs that have accreditation requirements, the University's IQAP, at the discretion of the AVPA or AVPGSPA may:

- allow programs' timelines for Quality Assurance to be modified to coincide with accreditation, provided that timeline does not exceed the maximum interval between cyclical reviews;
- allow external site visits by accreditation and program reviewers to occur concurrently; and
- allow content (data, analyses, or evaluations) developed for accreditation processes to be used for Quality Assurance when the accreditation materials directly satisfy the IQAP requirements.

The Associate Vice Presidents and the QA Office encourage open and frank conversations with programs about the opportunities to reduce workloads while still maintaining the integrity of the Quality Assurance process.

In the event that the Associate Vice Presidents allow elements of a cyclical program review to be substituted or augmented with elements from an accreditation review, a record of each substitution or addition will be kept as well as a record of the AVP's decision making (QAF 5.5). A Record of Substitution or Addition, and the grounds on which decisions were made, is eligible for

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[15] 5.5 Use of Accreditation and Other External Reviews in the Institutional Quality Assurance Process — Ontario Universities Council on Quality Assurance (oucqa.ca)

Cyclical Audit by the QC.

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6. AUDIT PROCESS

The Quality Council will audit each university once every eight years. An audit provides necessary accountability to post-secondary education's principal stakeholders (QAF 6). As the QAF states,

> "the objectives of the Cyclical Audit…are to ensure transparency and accountability in the development and review of academic programs, to assure students, citizens and the government of the international standards of quality assurance processes, and to monitor the degree to which a university has:
>
> a) Improved/enhanced its quality assurance processes and practices;
>
> b) Created an ethos of continuous improvement; and
>
> c) Developed a culture that supports program-level learning outcomes and student-centred learning."[16]

Cyclical Program Reviews that were undertaken within the period between audits and any new undergraduate and/or graduate programs that have been approved since the previous audit are eligible for selection for the university's next Cyclical Audit. Note that an audit cannot reverse the approval of a program to commence.

> **Commented [AC34]:** This is new.

The University is required to complete the following:

- participate in a half-day briefing with the Quality Council Secretariat and an Audit Team member approximately one-year prior to the scheduled Cyclical Audit;
- prepare an institutional self-study;
- describe the process for the preparation of the institutional self-study;

> **Commented [AC35]:** This is a new requirement.

- assign responsibility for the preparation of the self-study and submission of the self-study and desk audit documentation to the Quality Council Secretariat;
- establish the schedule for the site visit so that the audit team meet with all the stakeholders (listed in QAF 6.2.6);
- submit a report on the factual accuracy of the audit report draft;
- if necessary, submit a follow-up report frame with details about how the issues have been addressed;
- if necessary, make changes in the follow-up report;
- if required, participate in a focused audit and act accordingly;
- publish the Audit Report, absent any confidential information, on its website;
- publish the Follow-up Response Report, as well as the associated auditors' report on its website; and
- publish any Focused Audit Report on its website.
- The AVPA and AVPGSPA, with support from the QA Office, are jointly responsibility for drafting the institutional self-study. The following academic support units that are involved in new programs, cyclical reviews, and major modifications, will be asked for

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[16] Quality Assurance Framework (oucqa.ca) (2021)

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their input into the self-study: Institutional Analysis and Planning (IAP), Graduate Studies and Postdoctoral Affairs Office, Centre for Teaching Excellence, Centre for Extended Learning, Registrar's Office, Marketing and Undergraduate Recruitment, Co-op and Experiential Education, the Library, EDI-R and the Indigenous Relations Office and others as needed.

A lack of compliance with concerns raised from an audit can result in the Quality Council suspending enrolment in a particular program(s) or delaying or suspending new program approvals (Part One: QAF Principles). In addition, the University of Waterloo may be required to participate in a subsequent Focused Audit (QAF 6.3) when the Quality Council has some concerns about the quality assurance processes at the University.

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Appendix A: Sequence of Approval and Reporting

IQAP Item	Faculty-Level	Externally Reviewed	SUC*/SGRC*/ ACAC*	Senate	Quality Council	Ministry
Cyclical Program Reviews						
Final Assessment Report (FAR)	Dean's Signature	Yes	Approval	Information	Information	N/A
Progress Report	Dean's Signature	No	Approval	Information	No	N/A
New Program Proposals						
Undergraduate Major	Approval	Yes, if 'brand-new'	Approval	Approval	Yes, if 'brand-new'	Yes, in non-core areas[17]
Undergraduate Degree	Approval	Yes	Approval	Approval	Approval	Yes, in non-core areas[17]
Type 2 & 3 Graduate Diploma	Approval	No	Approval	Approval	Approval	Yes, if Type 3 GDip
Graduate Degree	Approval	Yes	Approval	Approval	Approval	Yes
Progress Report for new programs	Dean's Signature	No	Approval	Information	Yes, if 'approved to commence, with report'	No
Major Modifications						
Major Modification to Existing Program	Approval	No	Approval	Approval	Information	Information
Minor Modification to Existing Program	Approval	No	Approval	No	No	No
New minor modification, non-credit (e.g., micro-credentials, badges etc.)	No	No	ACAC Approval	No	No	Yes- if OSAP eligible
New Undergraduate Diploma, Minor, Option, or Certificate	Approval	No	Approval	Approval	Information	Information, except UG Diplomas in non-core areas[17]
Graduate Field	Approval	No	Approval	Approval	Information	No
Graduate Specialization, Type 1 GDip	Approval	No	Approval	Approval	Information	No
Graduate Collaborative Program	Approval	No	Approval	Approval	Information	Yes– if tuition or grant funding is impacted

*As delegated by Senate

Commented [AC36]: New addition.

Commented [AC37]: Pre-2016 were treated as new programs using New Program approval protocol but are now handled as a major modification.

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[17] Consult Institutional Analysis and Planning (IAP) for Ministry core/non-core areas.

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UNIVERSITY OF WATERLOO | Senate

For Discussion   **Open Session**

To: **Senate**

Sponsor: James W. E. Rush
                               Vice-President, Academic and Provost

Presenter: David DeVidi
                               Associate Vice-President, Academic

Contact Information: david.devidi@uwaterloo.ca

Date of Meeting: January 29, 2024

Agenda Item Identification: **13c. Report – University Committee on Student Appeals Annual Report (Policy 72)**

Summary:

This report provides information required to be reported annually to Senate for the period 1 September 2022 to 31 August 2023, as well as the information previously provided to Senate for the three years prior.

The numbers reported in the attached chart include findings of guilt for graduate and undergraduate students at the University and faculty levels Associate Deans disciplinary decisions, and Faculty Committee on Student Appeals (FCSA) and University Committee on Student Appeals (UCSA) decisions. The level of measurement is *cases*, not individual students, and some cases involve multiple students.

End users in each Faculty enter data into the Campus Incident System (CIS). The numbers in this report are extracted from the CIS by the Secretariat. It has been known for some time that there are inconsistencies in the way particular sorts of action are entered into the various academic offence categories by different Faculties, which obviously affects the accuracy of the data and reduces its value. The UCSA Chairs and Associate Deans who handle academic discipline therefore initiated a working group, led by the Director of the Office of Academic Integrity, which consulted with IST, the Secretariat, and end users to identify ways to improve the accuracy and consistency of academic reporting in the CIS. Recommendations were made and are being implemented, data entry documentation has been updated, and end user training will happen soon. This is an interim solution as the CIS home-grown system is at the end of its lifecycle. The process to find a replacement has begun.

Academic offence numbers increased substantially during the pandemic and were particularly high in the wake of the switch to emergency remote learning in 2020. Most categories of academic offences have been declining in frequency since 2020-21. Unauthorized co-operation or collaboration (2769) is the most frequent offence and occurs more than twice the amount of the second most reported offence – plagiarism (1226); it is noteworthy that the boundary between these two categories is not precise.

Click or tap here to enter text.   **1**

Recognizing the difficulties that the inconsistencies described above create for attempts to interpret the data, Associate Deans, Undergraduate (ADUs) who are largely responsible for handling student discipline within Faculties, were consulted for their insights on trends and patterns. Their impression is that the decline in academic discipline cases since 2020-21 is largely driven by the return to a greater percentage of courses being offered in person. An area of interest in 2023 was the impact of ChatGPT and other generative AI software. The ADUs reported that ChatGPT and similar tools were not involved in many discipline cases. While this might be regarded as surprising given the general level of concern about GenAI and academic integrity in the public sphere, the ADUs reported that they, and many instructors, often took potential cases of academic misconduct involving these tools as an opportunity for formative conversations with students rather than matters that required discipline (e.g., to provide guidance on proper and improper use of these tools in an academic setting).

To preserve confidentiality, cases are not reported by faculty, unit or program. Annual summaries (with identifying student and faculty names removed) of discipline cases, grievances and appeals are posted to the Secretariat's website: https://uwaterloo.ca/secretariat/discipline-grievances-and-appeals/university-committee-student-appeals/university-committee-student-appeals-summary-discipline.

Jurisdictional Information:

In accordance with Policy 72 – Student Appeals, section 5, the UCSA shall report annually to Senate on the number of cases heard at the University and faculty levels, their nature and such recommendations as it sees fit to make with respect to matters under its jurisdiction.

Governance Path:
Senate Executive Committee: 15/01/24

Documentation Provided:

Appendix A: UCSA Annual Report – 2022-2023 Table

Appendix A: UCSA Annual Report – 2022-2023 Table

DISCIPLINE OFFENCE	2019-2020	2020-2021	2021-2022	2022-2023
ACADEMIC				
Academic or admission fraud	0	0	9	16
Altering or falsifying a relevant document	0	4	5	16
Cheating	1340	2394	869	285
Contravention of statute	0	0	0	0
Impersonation	57	14	0	8
Misrepresentation	25	226	74	27
Obtaining confidential academic materials	4	16	4	0
Plagiarism	1922	2198	1710	1226
Theft of intellectual property	98	405	67	55
Unauthorized aids or assistance	604	1482	409	237
Unauthorized co-operation or collaboration	1366	3647	2858	2769
Unauthorized resubmission of work	12	19	22	8
Violation of examination regulations	159	153	65	1
Violation of instructor copyright	0	450	186	12
Other	1	83	6	10
NON-ACADEMIC				
Contravention of a statute	0	0	0	0
Disruptive, dangerous, aggressive or threatening behaviour	14	7	9	12
Infringing unreasonably on the work of others	1	0	0	0
Mischief	0	0	30	4
Misuse of University resources	2	0	2	2
Theft	0	0	0	8
Unauthorized use of equipment	0	0	0	0
Unethical behaviour	0	14	2	9
Vandalism	0	0	0	4
Violation of safety regulations	4	401	5	9
Other	10	83	31	4

*The numbers in this table represent cases and not individual students.

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For Approval   **Open Session**

To:	**Senate**
From: **Contact Information:**	Secretariat secretariat@uwaterloo.ca
Date of Meeting:	January 29, 2024
Agenda Item Identification:	**14a. Recommended Amendments to Policy 3 – Sabbatical and Other** **Leaves for Faculty Members and to Policy 43 – Special Conditions for Employment for Deans**

Recommendation/Motion:

To approve the proposed amendments to Policy 3 – Sabbatical and Other Leaves for Faculty Members and to Policy 43 – Special Conditions for Employment for Deans, as described in this report and attachment;

And further to recommend that the Board of Governors give final approval to the same proposed amendments.

Summary:

In October 2023 the Faculty Relations Committee considered amendments to the policies that would mitigate the granting of an extra and unintended administrative credit to certain administrators. The committee agreed to recommend the suggested amendments to the policies to prevent the unintended 'doubling-up' of administrative service credits and would provide clarity in the application of the policy by incorporating the necessary information from Policy 43 and the so-called "Chakma memo" into Policy 3. As per the requirements for approval of class "F" and class "A" policies under Policy 1, the committee recommended the amendments to the president which were approved on 27 November 2023, and are further recommended onward to Senate (and presumptively thereon to the Board of Governors).

Jurisdictional Information:

This item is submitted to Senate in accordance with the requirement for approvals of Class F and Class A policies which is described in Policy 1, section 4 (excerpt):

> **4. Jurisdiction, Initiation and Development**
>
> ...
>
> **Class F**
>
> ...
>
> **Approvals**
> The approval process is a collegial one in which the approval by each of the Senate, the Administration,

1

the Faculty Association and the Board of Governors, is required. The approval route is from the FRC to the President, then to Senate, and finally to the Board of Governors. Upon receipt of the new or amended policy from the FRC, the President will approve it and recommend it to Senate, or return it to the FRC with accompanying reasons for its return.

Upon receipt of the new or amended policy from the President, Senate will approve it and recommend it to the Board of Governors, or return it to the FRC with accompanying reasons for its return.

Upon receipt of the new or amended policy from Senate, the Board of Governors will approve it and the policy will be in force, or return it to the FRC with accompanying reasons for its return.

If the policy is returned at any stage, the FRC will review the reasons given for its return, make any revisions that it deems necessary, and return the (amended) policy for approval so long as it continues to have majority support from members appointed by each of the Administration and Faculty Association. If that support is lost, the draft policy will be shelved and Senate so informed.

...

Class A

Initiation, Development and Approval

As for Class F, except that the Policy Drafting Committee may be differently constituted...

Governance Path:

Faculty Relations Committee approval date (mm/dd/yy): 11/16/23

President approval date (mm/dd/yy): 11/27/23

Senate approval date (mm/dd/yy): 01/29/24 [prospective]

Board of Governors approval date (mm/dd/yy): 02/06/24 [prospective]

Documentation Provided:

-   Memo to President from Faculty Relations Committee, 24 November 2023

To: **Vivek Goel, President and Vice-Chancellor**

From: **David Porreca, President, Faculty Association (co-chair, Faculty Relations Committee)**
James W.E. Rush, Vice-President, Academic & Provost (co-chair, Faculty Relations Committee)

Date: **24 November 2023**

Subject: **Proposed Amendments to Policy 3 – Sabbatical and Other Leaves for Faculty Members and Policy 43 – Special Conditions for Employment for Deans**

Policy 3 – Sabbatical and Other Leaves for Faculty Members (Policy 3) is a Class F policy that was last updated on 5 June 2001.

Policy 43 – Special Conditions for Employment for Deans (Policy 43) is a Class A policy that was established and last updated on 11 April 1972. Policy 43 is considered in relation to the attached memo from then-Vice-President Academic & Provost, Amit Chakma, which provides a directive that allows those considered in Policy 43 (Deans, Associate Deans, Chairs/Directors) to take an administrative leave of four months for four years of administrative service, at full pay, in advance of or subsequent to an approved sabbatical leave and to apply unused administrative service credit of less than four years as a salary top-up (the Chakma Memo).

Class F Policy Requirements under Policy 1 – Initiation and Review of University Policies

The responsibility for Class F policy development is vested in the Faculty Relations Committee (FRC). Policy 1 states that requests for amendment of a Class F policy shall be reviewed by the FRC which will decide whether to proceed with the request. The decision will be to proceed if a majority of the members appointed by each of the Administration and the Faculty Association is in favour.

Normally, in the course of development of the Class F policy, a Faculty Policy Drafting Committee (FPDC) will be formed, with terms of reference provided by the FRC. Where an FPDC is established, the draft policy is sent by the FPDC to the FRC, who, once satisfied with the draft, will forward it to the Senate, the Vice-President, Academic & Provost and the Board of Directors of the FAUW for comment. That said, Policy 1 states that minor amendments may be dealt with directly by the FRC without the formation of an FPDC.

The approval process is a collegial one in which the approval by each of the Senate, the Administration, the Faculty Association and the Board of Governors is required. The approval route is from the FRC to the President, then to Senate, and finally to the Board of Governors. Upon receipt of the amended policy from the FRC, the President will approve it and recommend it to Senate (or return it to the FRC with reasons). Upon receipt of the amended policy from the President, Senate will approve it and recommend it to the Board of Governors (or return it to the FRC with reasons). Upon receipt of the amended policy from Senate, the Board of Governors will approve it and the policy will be in force (or return it to the FRC with reasons). If the policy is returned at any stage, the FRC will review the reasons given for its

return, make any revisions that it deems necessary and return the amended policy for approval so long as it continues to have majority support from members appointed by each of the Administration and the Faculty Association.

Class A Policy Requirements under Policy 1 – Initiation and Review of University Policies

Responsibility for the initiation, development and approval of Class A policies is the same as listed above for Class F, except that the President may appoint up to two additional members to the FPDC representing other constituent groups.

Proposed Amendments

At a meeting held on 5 October 2023, the FRC considered amendments to Policy 3 and Policy 43, presented by a member of the committee, intended to clarify the interpretation of the two policies and the Chakma Memo. The committee agreed that as written, and as sometimes interpreted, the policies allow those who serve in the roles of Dean, Associate Dean or Chair/Director to receive a service credit toward sabbatical leave under Policy 3, an administrative credit toward sabbatical leave under Policy 3 and an extra and unintended administrative credit under Policy 43. The suggested amendments to the policies would prevent the unintended doubling-up of administrative service credits and would provide clarity in the application of the policy by incorporating the necessary information from Policy 43 and the Chakma Memo into Policy 3.

The FRC unanimously agreed to consider the proposed changes within the FRC, without the formation of a formal FPDC as contemplated by Policy 1. The changes were deemed to be minor in that they did not alter intended practices under the policies and the Chakma Memo, rather they proposed to amend the wording of Policy 3 for clarity, formalizing the directive of Policy 43 and the Chakma Memo therein.

Members unanimously supported the proposed amendments to Policy 3 below and recommend that the proposed amendments come into effect upon final approval by the Board of Governors, with those in Dean, Associate Dean, Chair/Director roles prior to that date exempted.

Policy 3 Suggested Amendment – Section 3

3. SABBATICAL LEAVE

Sabbatical leave may be granted for a period of up to, but not exceeding, twelve months. The University will continue salary payments to the grantee, subject to the terms outlined below.

Faculty members are eligible to apply for a regular sabbatical leave (either a half-year leave at full salary or a full-year leave at 85% salary) to be taken after six years, full-time (including 12 terms teaching) in the professorial ranks.

"Half-year leave" shall mean leave from normal teaching duties for one term (approximately four months) of the two teaching terms normally required in a 12-month period plus one-half of a non-teaching term. Salary will continue at the individual's normal annual rate.

"Full-year leave" shall mean leave from normal teaching duties for the two teaching terms normally required in a 12-month period plus one full non-teaching term. Salary will continue at 85% of the individual's normal annual rate.

Sabbatical leave is subject to the condition that if a faculty member is eligible to apply for regular sabbatical leave and such leave is deferred by the individual, in consultation with the Department Chair, the additional time served, up to a maximum of three years, may be applied toward eligibility for a succeeding sabbatical leave or may be used to enhance the 85% salary of a current full-year sabbatical leave at the rate of one-twelfth of the normal salary for each extra year of service credit. Total income from the University may not exceed 100% of the normal salary for the year. If deferral is at the request of the University, the three-year limit on additional service credit does not apply.

An "early sabbatical" leave may be awarded after a minimum of three years, full-time (including six terms teaching) in the professorial ranks. Early sabbaticals are half-year leaves at 85% salary and consume credit for three years of service. For early sabbaticals, unused years of service credit count toward subsequent sabbatical leaves and may not be taken in terms of salary equivalent.

Faculty members holding probationary appointments may apply for a special early sabbatical at full salary rather than at 85% of salary; this sabbatical would normally be completed during the fourth year of probationary appointment.

Where faculty members have assumed substantial administrative responsibilities (e.g. Deans, Associate Deans, Department Chairs, or School Directors) for an extended period (usually four or five years), they shall normally be present on campus for three terms each year. In those or in other exceptional circumstances, the University, at the discretion of the Vice-President, Academic & Provost, may waive the normal service requirement or the normal restriction against granting two consecutive leaves to a faculty member.

Where faculty members have accrued a number of years' administrative credit as Dean, Associate Dean, Department Chair or School Director, they may exercise the following option:

- Four years of unused administrative service credit may be exchanged once for four months of fully paid leave; such leaves may be taken in advance of or subsequent to an approved sabbatical leave, allowing a faculty member to be away from campus for up to 16 consecutive months.
- Unused administrative service credit of less than four years may be used only as a salary top-up.

That is, one must have at least four years of unused administrative service credit in order to exchange it for paid leave, and such an exchange may occur only once during a faculty member's tenure at the University.

Faculty members with substantial administrative duties will accrue administrative credit in addition to the normal service credit. Administrative credits do not count toward eligibility for sabbatical, but may be used for sabbatical salary enhancement at the rate of one-twelfth of the normal salary for each year of administrative service; total income from the University may not exceed the individual's normal annual salary. Unused administrative credit may be used for salary enhancement toward a subsequent sabbatical but is otherwise forfeited.

The following consultations have taken place:
- Deans' Group – October 4, 2023
- FAUW Board of Directors – October 26, 2023

This amendment is respectfully submitted to you as a minor amendment to Policy 3, and Policy 43, requesting your approval and recommendation to Senate.

Please indicate your decision below.

☑ I approve   □ I do not approve for the following reasons:
□ I approve with the following recommendations:

_____   _____
_____   _____
_____   _____
_____   _____

_____   _____
Vivek Goel   Date
President and Vice-Chancellor

EFFECTIVE JULY 1, 2003

ADMINISTRATIVE CREDIT (USE OF) FOR:
SABBATICAL SALARY ENHANCEMENT
4 FOR 4 EXCHANGE

Sabbatical accrual and administrative credit at UW
Six years of normal service makes an active faculty member eligible to apply for a 12-month sabbatical leave at 85% salary (or a 6-month leave at full salary), and three years of normal service makes an active faculty member eligible for a 6-month "early" sabbatical leave at 85% salary. In addition, administrative service as Dean, Associate Dean, Department Chair, or School Director provides administrative service credit equal to the term of the administrative appointment (i.e., a 3-year appointment equals 3 years' admin. credit).

Sabbatical Salary Enhancement
Administrative credit may be used as salary top-up, to bring the normal sabbatical salary to 100% of normal salary. (Currently, 1 year & 10 months of admin. credit will enhance a 12-month leave to full salary.)

4 For 4 Exchange (or use of excess administrative credit)
Where faculty members have accrued a number of years' administrative credit, they may exercise the following option:
- Four years of unused administrative service credit may be exchanged **once** for four months of fully paid leave; such leave may be taken in advance of or subsequent to an approved sabbatical leave, allowing a faculty member to be away from campus for up to 16 consecutive months.
- Unused administrative service credit of less than four years may be used only as salary top-up.
    That is, one must have at least four years of unused administrative service   credit in order to exchange it for paid leave, and such an exchange may occur   only once during a faculty member's tenure at UW.

Amit Chakma
Vice-President Academic & Provost
June 2003

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UNIVERSITY OF WATERLOO | Senate

Senate Graduate & Research Council

For Information   **Consent Agenda**   **Open Session**

To:	**Senate**
Sponsors:	Charmaine Dean Vice-President, Research & International Jeff Casello Associate Vice-President, Graduate Studies and Postdoctoral Affairs
Presenter: **Contact Information:**	Jeff Casello jcasello@uwaterloo.ca
Date of Meeting:	January 29, 2024
Agenda Item Identification:	**15. Report – Senate Graduate & Research Council**

Summary:

Senate Graduate & Research Council met on November 20, 2023 and agreed to forward the following items to Senate for information as part of the consent agenda. On behalf of Senate, the following items were approved:

1. **Research Ethics**

    Council approved the membership of one (1) new members of the Human Research Ethics Board.

2. **Graduate Awards**

    Council approved the following graduate awards:

    a. GrandBridge Energy Green Energy Graduate Scholarship (trust)

    b. Statistics & Actuarial Science Graduate Outstanding Performance Award (operating)

    c. Pure Math Doctoral Thesis Completion Award (operating)

    d. Pure Math Graduate Entrance Scholarship (operating)

    e. Electrical & Computer Engineering Master of Engineering Award of Excellence [EMAE] (operating)

3. **Academic Program Reviews**

    Following the review of the report and presentations from the programs, Council approved the following report:

    a. Final Assessment Report: [Environment, Resources, and Sustainability, and Social Ecological Sustainability](#)

    There were no issues noted in the report.

4. **Curricular Submissions**

    Council approved new courses, course changes, course inactivations, and minor program revisions for:

    a. [Faculty of Arts](#) (Psychology)

    b. [Faculty of Engineering](#) (Chemical Engineering; Civil and Environmental Engineering; Electrical and Computer Engineering)

    c. [Faculty of Health](#) (Aging Health and Well-Being; Public Health Sciences; Recreation and Leisure Studies; Social Work)

Jurisdictional Information:

As provided for in [Senate Bylaw 2](#), section 4.03, council is empowered to make approvals on behalf of Senate for a variety of operational matters:

c. Receive, consider, study and review briefs on any aspect of graduate studies and research from members of the university.

f. On behalf of Senate, consider and approve all new graduate courses, the deletion of graduate courses, and proposed minor changes to existing graduate courses and programs, and provide Senate with a brief summary of council's deliberations in this regard. Any matter of controversy that might arise may be referred to Senate.

i. On behalf of Senate, consider and approve all new graduate scholarships and awards. Any matter of controversy that might arise may be referred to Senate.

Senate Undergraduate Council

For Information	Consent Agenda	Open Session

To:	**Senate**
Sponsor:	David DeVidi Associate Vice-President, Academic
Presenter: **Contact Information:**	David DeVidi david.devidi@uwaterloo.ca
Date of Meeting:	January 29, 2024
Agenda Item Identification:	**16. Report – Senate Undergraduate Council**

Summary:

Senate Undergraduate Council met on November 21, 2023 and agreed to forward the following items to Senate for information as part of the consent agenda. On behalf of Senate, the following items were approved:

1. **Curricular Submissions**

   Council approved new courses, course changes, course inactivations, and minor program revisions for:

   a. Faculties of Arts and Environment (Sustainability and Financial Management Honours)

   b. Faculty of Engineering (Architectural Engineering; Biomedical Engineering; Chemical Engineering; Civil Engineering; Conrad School of Entrepreneurship & Business; Electrical & Computer Engineering; Environmental Engineering; Geological Engineering; Management Engineering; Mechanical Engineering; Mechatronics Engineering; Nanotechnology Engineering; School of Architecture; Systems Design Engineering)

   c. Faculty of Environment (Collaborative Design Specialization; Dean of Environment; Diploma in Environmental Assessment; Environment and Business Honours; Geography & Environmental Management; Knowledge Integration; Knowledge Integration Honours; Planning Honours; School of Environment, Enterprise & Development; School of Environment, Resources & Sustainability; School of Planning; Science, Technology, and Society Specialization; Urban Studies Minor)

   d. Faculty of Health (Bachelor of Science, Honours Health Sciences; Diploma in Gerontology; Health Informatics Option; Human Nutrition Minor; Kinesiology and Health Sciences; School of Public Health Sciences)

e. [Faculty of Mathematics](#) (Bachelor of Computer Science Data Science; Bioinformatics Specialization; Business Administration & Computer Science Double Degree; David R. Cheriton School of Computer Science; Dean of Mathematics; Honours Combinatorics and Optimization; Human Computer Interaction Specialization; Software Engineering Specialization)

f. [Software Engineering](#) (Software Engineering)

Jurisdictional Information:

As provided for in [Senate Bylaw 2](#), section 5.03, council is empowered to make approvals on behalf of Senate for a variety of operational matters:

c. On behalf of Senate; consider and approve all new undergraduate courses; the deletion of undergraduate courses; and proposed changes to existing undergraduate courses and minor changes to programs and/or plans; and provide Senate with a summary of council's deliberations in this regard. Any matter of controversy that might arise may be referred to Senate.

Senate Undergraduate Council

For Approval   **Consent Agenda**   **Open Session**

To:	**Senate**
Sponsor:	David DeVidi Associate Vice-President, Academic
Presenter: **Contact Information:**	David DeVidi david.devidi@uwaterloo.ca
Date of Meeting:	January 29, 2024

Agenda Item Identification:	**16a. Report – Senate Undergraduate Council:**
	     Regulation Revisions - Academic Considerations and
	     Accommodations

Recommendation/Motion:

To approve the proposed academic regulation revisions for the "University Policies, Guidelines and Academic Regulations, Assignments, Tests, and Final Exams, Accommodations" section of the Undergraduate Studies Academic Calendar, effective for the 2024-2025 Calendar, as presented.

Summary:

Senate Undergraduate Council met on November 21, 2023 and agreed to forward the following item to Senate for approval as part of the regular agenda.

Jurisdictional Information:

This item is being submitted to Senate in accordance with Senate Bylaw 2, section 5.03(a): "Make recommendations to Senate with respect to rules and regulations for the governance, direction and management of undergraduate studies in the university."

Governance Path:

Undergraduate Operations (mm/dd/yy): 10/26/23

Senate Undergraduate Council approval date (mm/dd/yy): 11/21/23

Highlights/Rationale:

In early 2019, the Verification of Illness Working Group was formed, with cross-campus representation, to implement recommendations regarding Verification of Illness articulated in the 2018 President's Advisory Committee on Student Mental Health.

In March 2021, a report was presented at the Undergraduate Operations meeting, outlining the work of the Verification of Illness Working Group, and recommending a process by which students could self-declare a short-term illness, without the need for formal documentation.

In the months that followed the Association Deans, Undergraduate, and the Registrar's Office used the learning that was gathered during the pandemic and the process students used to self-declare Covid-19 related illness or a requirement to self-isolate, to develop a pilot process for students to self-declare a short-term illness within Quest. The pilot began during the fall 2022 term.

The pilot will conclude at the end of the spring 2024 term. To move out of the pilot phase for the short-term absences, the Undergraduate Academic Calendar language requires updating. Additional updates to the Undergraduate Academic Calendar text have been proposed to reflect practice and increase clarity.

Documentation Provided:

Appendix A – Proposed Academic Considerations and Accommodations Revisions

Report - SUC: Appendix A – Proposed Academic Considerations and Accommodations Revisions

EXISTING	NEW DRAFT
University Policies, Guidelines and Academic Regulations **Assignments, Tests, and Final Exams** **Accommodations**	**University Policies, Guidelines and Academic Regulations** **Assignments, Tests, and Final Exams** **Academic Considerations and Accommodations**
From time to time, students will encounter extenuating circumstances such as significant illnesses, ongoing medical conditions, or religious observations that prevent them from meeting academic obligations. The University is committed to assisting students who experience these events. Students who are unable to meet assignment due dates or write a test must provide documentation verifying the events that have precluded them from meeting their academic deadlines. Elective arrangements (such as travel plans) are not considered acceptable grounds for granting an accommodation. **Accommodation Guidelines** When instructors elect to provide an accommodation, the options available to students vary based on the nature of the extenuating circumstances they are facing, and on the kind of evaluation mechanism they are unable to complete on time. For **in-term assignments**, instructors may use their discretion and allow an extension. If the instructor does not grant an extension and an element is missed, it is recommended that the weight of the missed element – an assignment, a laboratory report, or other evaluation mechanism – be transferred to similar types of elements due later in the term. If this option is not available, the weight of the missed assignment may be transferred to a test or the final examination.	Students' ability to complete some component of a course may be affected by short-term extenuating circumstances or long-term or chronic medical conditions (physical or mental). For short-term extenuating circumstances, the term Academic Consideration is applicable and provides students with consistent, fair, and pedagogically appropriate consideration, without compromising the academic integrity of the course or program. Short-term extenuating circumstances might include common illness and ailments such as a cold or flu, minor injuries, compassionate/personal/wellness needs (unrelated to a disability/condition), bereavement, and participation in University of Waterloo sanctioned academic or athletic events that prevent them from meeting academic obligations. In comparison, the term Academic Accommodations are modifications or adjustments to the way a student receives course curriculum and materials, participates in course activities, or demonstrates knowledge of course content and skills. Reasonable accommodations reduce or eliminate barriers in the academic environment but are not intended to alter the fundamental purpose or essential requirements of the academic program, milestone, or course. The University has a legal duty to accommodate students on a variety of grounds protected from discrimination including disability (which includes physical and mental health related conditions), creed, family status, and sex (including pregnancy and breast feeding).

If students are granted an accommodation for a **test**, the weighting of the missed test is added to the final examination weighting or spread over the remaining tests. Term tests are normally not deferred.

If a student is granted an accommodation to postpone a **final examination**, the exam is to be written no later than the student's next academic term when the course is offered. The examination may be written earlier if the student and the instructor mutually agree upon a time. The academic delegate from the unit offering the course should be informed of any arrangement for a make-up examination. If the course instructor is not available to set and mark the make-up examination as well as grade the course overall, the academic unit will arrange for these activities to be carried out.

Any unresolved disputes between instructors and students regarding the legitimacy of extenuating circumstances or the suitability of accommodations will be decided by the appropriate associate dean(s). When in doubt, students should approach the associate dean (undergraduate) from their home faculty. In such cases, any regularly scheduled University academic activity will be given precedence in the resolution of a conflict with a test or examination in another course. For students in courses taught at the Affiliated and Federated Institutions of Waterloo where there is no associate dean, the dean exercises these responsibilities.

Accommodations Due to Illness

Whether through Academic Consideration or Academic Accommodation, the University supports and upholds the duty to accommodate, and provides support to students who are experiencing extenuating circumstances.

Elective arrangements (such as travel plans) are not considered acceptable grounds for granting an academic consideration. Students who have long-term or chronic medical conditions (physical or mental) which may impede their ability to complete academic responsibilities are directed to seek academic accommodations through AccessAbility Services.

Academic Considerations

Short-Term Absences
Student may require a short-term absence from their academic responsibilities for any reason. For academic obligations during the Formal Lecture Period, students may self-declare a short-term absence within the student information system (Quest) using the Self-Declaration of Absence Form. Self-declared short-term absences will not be accepted for the course/class components of Clinic (CLN), Laboratory (LAB), and Studio (STU).

Students will be permitted one short-term absence declaration per academic term. For further absence in a single term, the student is required to submit a University of Waterloo Verification of Illness Form (VIF) or register for academic accommodations with AccessAbility Services (depending on the nature of the reasons for the absence).

When illness is the cause of a missed deadline, students should seek medical treatment and provide confirmation of the illness to the instructor(s) within 48 hours by submitting a completed University of Waterloo Verification of Illness form to support requests for accommodation due to illness. Students in Centre for Extended Learning (CEL) courses must submit their confirmation of the illness to the CEL.

The University of Waterloo Verification of Illness form is normally the only acceptable medical documentation. Students who consult their physician or use the services of an off-campus walk-in clinic must provide this form to the attending physician for completion; notes and forms created by the physician or clinic are normally not acceptable. Although not compelled to do so, instructors may accept medical documentation that contains the same information specified on the University of Waterloo Verification of Illness form. Health Services charges a fee for completing the University of Waterloo Verification of Illness form that is not covered by OHIP/UHIP. Fees for this service or those levied by off-campus practitioners are the student's responsibility.

False claims of illness and/or the submission of false supporting documentation of extenuating circumstances constitute an academic offence that will result in disciplinary action under Policy 71.

Adjustment of due dates or deferrals of term tests or final examinations are not automatic upon the presentation of suitable medical verification. Instructors will use this

A self-declared short-term absence will excuse students from their academic responsibilities for up to 2 consecutive calendar days (e.g. Wednesday, October 23 and Thursday, October 24). It applies to all courses (but not to CLN, LAB, or STU components, as noted above).

Students may choose to participate in some course activities that fall during the short-term absence, and still record an absence for other activity in that period. By participating in an activity, the student is indicating that particular activity shall not be considered as part of the excused absence covered by the short-term declaration.

During the 2-day academic consideration period, the instructor cannot require completion of any academic responsibilities. Students must contact the instructor no later than 24 hours after the missed assessment(s).

Absences Due to Illness
When a student experiences short-term illness and either; a) elects not to use the self-declared short-term absence, or b) is not eligible to use the self-declared short-term absence, they must provide a University of Waterloo Verification of Illness form, following the faculty-specific process for their home faculty.

Students should seek medical treatment and provide confirmation of the illness within 48 hours of the missed academic obligation by submitting a completed University of Waterloo Verification of Illness Form (VIF) to support requests for academic consideration due to illness.

documentation among all information available to them when determining whether accommodation is warranted.

Accommodations Due to Religious Observances
The University acknowledges that, due to the pluralistic nature of the University community, some students may seek accommodations on religious grounds. Accordingly, students must consult with their instructor(s) within two weeks of the announcement of the due date for which accommodation is being sought. Failure to provide a timely request will decrease the likelihood of providing an accommodation.

Accommodations Due to Final Examination Schedule Conflicts
Senate has determined that the University will strive to schedule final examinations conflict free and with:

- No student having two examinations in a row.
- No student writing in the last period on one day and the first period the next day.
-

Where this cannot be accomplished for a particular student, the University shall ensure **exam relief** by making alternative scheduling arrangements for that student. Students can elect to accept examination combinations that violate these constraints. In doing so, they understand that petitions or appeals based on a violation of the above conflicts will not be granted.

A final examination conflict: two final examinations that are scheduled on the same day, at the same time.

The University of Waterloo Verification of Illness Form is normally the only medical documentation accepted to support requests for academic consideration (except for self-declared requests that do not require documentation). Students who consult their physician or nurse practitioner or use the services of an off-campus walk-in clinic must provide this form to the attending physician for completion; notes and forms created by the physician or clinic are normally not acceptable. Medical documentation that contains the same information specified on the University of Waterloo Verification of Illness Form may be accepted, though the University is not compelled to accept it. Health Services charges a fee for competing the University of Waterloo Verification of Illness Form that is not covered by OHIP/UHIP. Fees for this service or those levied by off-campus practitioners are the student's responsibility.

False claims of illness and/or the submission of false supporting documentation of extenuating circumstances constitute an offence that may result in disciplinary action under Policy 71 (Student Discipline).

Academic considerations for absences due to illness are not automatic upon the presentation of acceptable medical documentation. Documentation along with all other information available will be considered when determining whether academic consideration is warranted.

Final Examination Schedule Conflicts
A final examination conflict is when two final examinations are scheduled on the same day, at the same time, or when back-to-back on the same day or last period of one day and the first period of the next day.

If students have an examination conflict with a Wilfrid Laurier University final exam that has been detected during the examination scheduling process, the department/instructor will be notified by the Office of the Registrar and asked to contact the individual students to discuss alternative examination arrangements to be determined by the department/instructor.

If students have an examination conflict that was not detected during the examination scheduling process, they must complete the Final Examination Timetable Conflict Form. The Office of the Registrar will confirm the conflict, then notify the department/instructor so that they can contact the individual students to discuss alternative examination arrangements to be determined by the department/instructor.

The University strives to create a conflict-free final examination schedule.

If students have a final examination conflict with a Wilfrid Laurier University final examination that has been detected during the final examination scheduling process, the Office of the Registrar will notify the department/instructor

If students have a final examination conflict that was not detected during the final examination scheduling process, they are required to complete the Final Examination Timetable Conflict Form. The Office of the Registrar will confirm the conflict then notify the department/instructor.

Departments/instructors who have been notified of confirmed final examination conflicts will determine alternative final examination arrangements and contact the impacted students to discuss the alternatives.

The University strives to schedule final examinations with:

- No student scheduled to write two final examinations in a row (i.e., back-to-back periods).
- No student writing in the last period on one day and the first period the next day.

Where this cannot be accomplished for a particular student, the University provides final examination relief by making alternative scheduling arrangements for that student, by shifting one final exam period giving the student an additional hour break. Students

can elect to accept final examination combinations that violate these constraints. In doing so, they understand that petitions or appeals based on a violation of the above conflicts will not be granted.

Guidelines for Providing Academic Considerations
University of Waterloo instructors provide academic considerations when appropriate conditions are met (see the criteria above).

When instructors are asked to consider students' extenuating circumstances, the options available to students vary based on the nature of the extenuating circumstances/events they are facing, on the kind of assessment they are unable to complete on time, and the instructor's own grading practices stated in the course outline.

- **For in-term assessments (assignments, poster symposia, presentations, etc.):** Instructors may use an alternative such as extension or transfer of weight to a subsequent assessment or test/exam.
- **For in-term tests and midterm exams:** The weighting of the missed test is normally added to the final examination or spread over the remaining tests. In-term tests are normally not deferred (unless there are no remaining tests to transfer weight to).
- **For final examinations:** The final examination may be deferred. Normally, it is to be written at a time mutually agreed by the student and instructor that is as soon after the missed examination as possible; in any case it is to be written no later than the student's next academic term in which a) the student has an academic term and, b) the course is offered.

- **For WaterlooWorks arranged co-op interviews:** Employers may follow up with the student, but the University cannot require an employer to reschedule the interview.

Any University academic activity that appears in the Schedule of Classes will be given precedence over alternate arrangements in the resolution of an academic consideration.

Any unresolved disputes between instructors and students regarding the legitimacy of the extenuating circumstances or the suitability of academic considerations will be decided by the appropriate associate dean(s). When in doubt, students should approach the associate dean from their home faculty. For students taught at the Affiliated and Federated Institutions of Waterloo where there is no associate dean, the dean exercises these responsibilities.

Academic Accommodations

Accommodations Due to Disability
The University of Waterloo is committed to upholding the rights of persons with disabilities and creating accessible and inclusive learning environments for all. AccessAbility Services is the University's centralized office for the management of academic accommodations for all students with known or suspected disabilities and disabling conditions (injuries, medical conditions, and impacts of trauma). Students seeking academic accommodations as a result of disability/disabling conditions will register with AccessAbility Services to determine eligibility for academic accommodations, and to develop an academic accommodation plan as required. AccessAbility Services will relay

the accommodation plan to instructors, and will work with the instructor and the student to ensure an appropriate accommodation plan is implemented. Disability covers a broad range and degree of conditions that can be permanent, temporary, sporadic, and suspected, including, but not limited to, physical disabilities, learning disabilities, developmental disabilities, mental health disabilities, medical conditions, and the physical, emotional, and psychological effects of a trauma (e.g., sexual violence, discrimination, or oppression).

Refer to the Student Academic Accommodation Guidelines for more information on eligibility for academic accommodations, the process for registering with AccessAbility Services, and for information on roles and responsibilities in the accommodation process.

Academic Accommodations Due to Creed/Religion
The University acknowledges that, due to the pluralistic nature of the University community, some students may seek academic accommodations on religious grounds.
Students can complete the religious observance self-declaration form in Quest, which will inform their instructors of the potential conflict for certain dates. As the dates of important religious observances are generally known well in advance, students must consult with their instructor(s) within two weeks of the announcement of the due date or scheduled examination date for which academic consideration is being sought. The Self-Declaration Form for short-term absences may also be used by students requiring an absence of 2 days or less during the Formal Lecture Period.

	Academic Accommodations Due to Other Code Grounds Students seeking an academic accommodation related to a protected ground (e.g., creed, family status and sex including pregnancy and breastfeeding) should inform their instructor/academic unit as soon as they become aware of the need.

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Senate Undergraduate Council

| **For Approval** | **Consent Agenda** | **Open Session** |

To: **Senate**

Sponsor: David DeVidi
Associate Vice-President, Academic

Presenter: David DeVidi
Contact Information: david.devidi@uwaterloo.ca

Date of Meeting: January 29, 2024

Agenda Item Identification: **16b. Report – Senate Undergraduate Council:**
                                           Regulation Revisions – Invalid Credential Combinations

Recommendation/Motion:

To approve the proposed academic regulation revisions to the Invalid Credential Combinations section of the Undergraduate Studies Academic Calendar for (i) the Diploma of Excellence in Geographic Information Systems, and (ii) the Diploma in Sustainability, and Sustainability and Financial Management, Honours, as presented and effective 1 September 2024.

Summary:

Senate Undergraduate Council met on November 21, 2023 and agreed to forward the following item to Senate for approval as part of the regular agenda.

Jurisdictional Information:

This item is being submitted to Senate in accordance with Senate Bylaw 2, section 5.03(a): "Make recommendations to Senate with respect to rules and regulations for the governance, direction and management of undergraduate studies in the university."

Governance Path:

Environment Faculty Council approval date (mm/dd/yy): 09/14/23

Senate Undergraduate Council approval date (mm/dd/yy): 11/21/23

Highlights/Rationale:

i. As well, the School of Planning is inactivating their Decision Support and Geographic Information Systems Specialization; therefore, the invalid combination can be removed from the Diploma of Excellence in Geographic Information Systems, allowing Planning students to complete this credential.

ii. The proposed revision is to make the Diploma in Sustainability an invalid combination with Sustainability and Financial Management, Honours. These two academic credentials have overlapping courses and learning outcomes. Also, due to the structure of the Diploma in Sustainability, it is not possible for students in Sustainability and Financial Management, to complete the out of faculty requirements. Sustainability and Financial Management was consulted and has approved this invalid combination which was presented to Arts as an information item.

Proposed Revisions:

Current calendar text: https://ugradcalendar.uwaterloo.ca/page/Acad-Regs-Invalid-Credential-Combinations

Proposed calendar text to the 2024-2025 Calendar which was revised by Senate at the March 14, 2023: (underlined and bolded = new, strikethrough = deletion)

Invalid Credential Combinations

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~~Excellence in Geographic Information Systems, Diploma of~~	~~Environment~~	~~Decision Support and Geographic Information Systems Specialization (Planning major)~~

...

Sustainability, Diploma of	Environment	**Sustainability and Financial Management Honours;** School of Environment; Resource and Sustainability Honours~~;~~ Students graduating with a Joint Environment, Resource and Sustainability degree.
Sustainability and Financial Management, Bachelor of	Arts and Environment	Arts and Business; Management Studies Minor; **Sustainability, Diploma of**~~;~~ Any stand-alone major

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UNIVERSITY OF WATERLOO | Senate

Senate Undergraduate Council

For Approval   **Consent Agenda**   **Open Session**

To:	**Senate**
Sponsor:	David DeVidi Associate Vice-President, Academic
Presenter: **Contact Information:**	David DeVidi david.devidi@uwaterloo.ca
Date of Meeting:	January 29, 2024
Agenda Item Identification:	**16c. Report – Senate Undergraduate Council:** **Regulation Revision - Faculty of Environment, Overview of Co-op** **Plan Requirements**

Recommendation/Motion:

To approve the proposed academic regulation revisions for the "Overview of Co-op Plan Requirements" of the Faculty of Environment, as presented and effective 1 September 2024.

Summary:

Senate Undergraduate Council met on November 21, 2023 and agreed to forward the following item to Senate for approval as part of the regular agenda.

Jurisdictional Information:

This item is being submitted to Senate in accordance with Senate Bylaw 2, section 5.03(a): "Make recommendations to Senate with respect to rules and regulations for the governance, direction and management of undergraduate studies in the university."

Governance Path:

Environment Undergraduate Studies Committee approval date (mm/dd/yy): 07/19/23

Environment Faculty Council approval date (mm/dd/yy): 09/14/23

Senate Undergraduate Council approval date (mm/dd/yy): 11/21/23

Undergraduate Council   **1**

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Highlights/Rationale:

Students may not be able to continue in Co-op after 3B term, if missing one Co-op requirement. This would apply if an outstanding PD course cannot be completed on an academic term, or there is no opportunity to revise study/work sequencing.

Proposed Revisions:

Current calendar text: https://ugradcalendar.uwaterloo.ca/page/ENV-Overview-of-Coop-Plan-Requirements

Proposed calendar text: (underlined and bolded = new, strikethrough = deletion)

Overview of Co-op Plan Requirements

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Notes:

1. Students missing ~~two (or more)~~ **a** co-op requirement~~s~~ by the end of their 3B term will normally be removed from co-op, unless they have successfully been employed for four work terms. These students will remain in co-op but will not be eligible for a co-op degree.

2. Students not meeting their plan's co-op requirements may be considered for transfer to another Faculty of Environment academic regular plan.

3. See the table below for the sequencing of academic and work terms. Transfer students may be required to follow a different sequencing.

4. Further information on co-operative study is stated in the Co-operative Education and Career Action section of this Calendar.

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UNIVERSITY OF WATERLOO | Senate

Senate Undergraduate Council

For Approval   **Consent Agenda**   **Open Session**

To:	**Senate**
Sponsor:	David DeVidi Associate Vice-President, Academic
Presenter: **Contact Information:**	David DeVidi david.devidi@uwaterloo.ca
Date of Meeting:	January 29, 2024
Agenda Item Identification:	**16d. Report – Senate Undergraduate Council:** **Regulation Revision - Faculty of Environment, Repeat Course Rule**

Recommendation/Motion:

To approve the proposed academic regulation revisions for the Faculty of Environment's Repeat Course Rule, effective 1 September 2024, as presented.

Summary:

Senate Undergraduate Council met on November 21, 2023 and agreed to forward the following item to Senate for approval as part of the regular agenda.

Jurisdictional Information:

This item is being submitted to Senate in accordance with Senate Bylaw 2, section 5.03(a): "Make recommendations to Senate with respect to rules and regulations for the governance, direction and management of undergraduate studies in the university."

Governance Path:

Environment Undergraduate Studies Committee approval date (mm/dd/yy): 07/19/23

Environment Faculty Council approval date (mm/dd/yy): 09/14/23

Senate Undergraduate Council approval date (mm/dd/yy): 11/21/23

Highlights/Rationale:

Combining and clarifying counting and calculation rules and processes for repeating courses.

Proposed Revisions:

Current calendar text: http://ugradcalendar.uwaterloo.ca/page/ENV-Academic-Standing

Proposed calendar text: (underlined and bolded = new, strikethrough = deletion)

Academic Standing

...

~~Repeated Courses~~

~~When a course is repeated, both grades will appear on the student's record and will be included in the calculation of the cumulative overall average. If the course is part of the major requirement, both grades will also be included in the cumulative major average.~~

...

Current calendar text: http://ugradcalendar.uwaterloo.ca/page/ENV-Courses-Enrolment-and-Grades

Proposed calendar text: (underlined and bolded = new, strikethrough = deletion)

Courses, Enrolment, and Grades

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Repeating ~~Passed~~ Courses

Normally, special permission, beyond course requisites, is not required to repeat a failed course.

Students must submit a Petition for Exception to Academic Regulations to repeat a course they have already passed and for which they have achieved credit. **If approval to repeat a passed course is granted, only one of the two attempts will count towards an academic credential(s).**

All course attempts will be calculated in plan averages.

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UNIVERSITY OF WATERLOO

For Information   **Open Session**

To: **Senate**

Sponsor: James W.E. Rush, Vice-President, Academic and Provost
Contact Information: provost@uwaterloo.ca

Presenter: James W.E. Rush, Vice-President, Academic and Provost
Contact Information: provost@uwaterloo.ca

Date of Meeting: **January 29, 2024**

Agenda Item Identification: **17. Report from Senate Long Range Planning Committee**

Summary:

Senate Long Range Planning Committee met on 29 November 2023. A summary of the items discussed is provided for the information of Senate.

1. New Interdisciplinary Programs, Networks, and Initiatives Fund

    As a continuation to similar updates at the September 2023 meeting, members obtained briefings on certain projects launched under the fund. The fund provides seed funding over three to five years to launch transformative Faculty-led (ideally more than two) interdisciplinary activity that addresses gaps and leverages opportunities in priority areas by working collaboratively with faculty members and other relevant stakeholders across at least two faculties. Deans serve as the responsible lead on each project, and in identifying ideas and scoping funding requirements. A maximum of $500,000 is provided to approved activity, and all projects are expected to be completed by the end of the funding or have reached a level of self-sustainability.

    Members heard detailed updates and planned activities for two approved projects:

    i. Indigenous Initiatives @ Waterloo to Address Truth and Reconciliation – goal of fostering Indigenous student engagement, including through creating welcoming spaces on campus; land-based learning labs and gardens; development of a Type 2 diploma in Indigenous Studies to be launched for Fall 2024, with a transdisciplinary approach and open to all graduate students; strategy for Indigenous advancement includes engaging grant writers with an Indigenous focus toward securing funding for initiatives; Faculty of Health launched the Nish Vibes podcast hosted by Indigenous Knowledge Keeper, Elder Myeengun Henry

    ii. Interdisciplinary Master's Fellowship in Computation and Data – this program promotes interdisciplinary research in the area of data by promoting and funding co-supervision opportunities of master's students by a professor with a primary appointment in Mathematics along with another professor from one of the other five Faculties; three years of funding has been secured to provide up to 15 fellowships per year (at $10K per student per year); parallel activities include recruitment of graduate students and the launch of the Math+X Interfaculty Research Workshop in September 2023

2. Campus Master Planning

The most recent master plan was completed in 2009, as an update to the previous 1992 plan; aim to involve stakeholders as well as the President's Advisory Committee on Design; a student-led project from the School of Planning will bring forward a report to advise on the process for the next iteration of master planning on campus; Waterloo currently has ~300 acres of lands that can be developed or which have infill opportunities, with additional opportunities related to satellite campuses.

The timeline for the campus master plan exercise is 18 months, with completion expected in 2024. The plan will integrate key considerations including: updates to the R&T Park Strategy/land use, campus housing needs, potential opportunities in downtown Kitchener and at satellite campuses, sustainability, accessibility, access to transportation, and Indigenous wayfinding and design.

3. Overview of Integrated Planning

Waterloo is adopting a model of integrated planning to link specific initiatives/activities with strategic directions and frameworks, and to adopt an approach where planning includes clear scoping, timeframes, costs, assessment metrics, and identification of dependencies on other planned tasks or units within the University. The proposed approach is proactive and intends to provide a system to track and advance planned activities in a transparent manner. Next steps include the launch of the Integrated Planning and Budget Office; a development of a new budget model and the interface through which integrated planning would interact with the budget model; and developing a better understanding of issues pertaining to data, which will be a foundational support for integrated planning processes.

4. Overview of Portfolio: Associate Vice-President, Academic Operations

In March 2023, Paul Fieguth was appointed to a five-year term in this new administrative role which aims to foster relationships in alignment with academic priorities and plans, while overseeing connections with the physical infrastructure/capital planning. A core focus of the role is integrated planning, linking planning for physical resources with stakeholder engagement and all within the context of the University's overarching strategic goals. A variety of active projects are underway within this portfolio, including the creation/leadership of an integrated planning and budget office; a new university budget model, a comprehensive examination of data governance; an examination of space planning/renovation processes; and certain projects in collaboration with the Registrar's Office and the Library.

University of Waterloo

Office of the Vice President, Research and International

For Discussion   **Open Session**

To: **Senate**

Sponsor: Charmaine B. Dean, Vice President Research and International
Contact Information: vpri@uwaterloo.ca

Presenter: Charmaine B. Dean, Vice President Research and International
Contact Information: vpri@uwaterloo.ca

Date of Meeting: **January 29, 2024**

Agenda Item Identification: **18. Report – Vice-President, Research & International**

Summary:

Presenting the Vice-President, Research and International Report to Senate for October 2023. This report to Senate highlights successful research, international and entrepreneurial outputs and outcomes for the period mid October – November – December 2023 by the thematic areas as outlined in Waterloo's Strategic Plan 2020-25.

Documentation Provided:

- Vice-President, Research and International January 2024 Report to Senate

Vice-President, Research & International
Report to Senate
January 2024

Introduction
This report to Senate highlights successful research and international outputs and outcomes for the period mid-October - November- December 2023 by the thematic areas as outlined in Waterloo's Strategic Plan 2020-25.

Funded Research Awards

Canada Excellence Research Chairs (CERC)

CERC Program Overview:
- The CERC program, initiated in 2008, is a tri-agency initiative aimed at enhancing Canada's global standing in research and innovation by awarding renowned researchers substantial funding to establish research programs at Canadian universities.
- These awards are recognized as highly prestigious internationally and recipients are selected through an independent, multidisciplinary and competitive peer-review process.
- In the current 2022 competition, 34 new Canada Excellence Research Chairs (CERC) at 18 post-secondary institutions nationwide were appointed.
- **University of Waterloo -2 New CERCs starting at the University of Waterloo, 2024, each Chair ship lasts 8 years:**

Sara A. Hart
New CERC in Development Science, Department of Psychology, University of Waterloo $4,000,000
Hart is a renowned expert in developmental psychology. Her research employs precision education to investigate learning challenges in children, using interdisciplinary approaches and advanced statistical methods.
In her role as the CERC in Developmental Science, Hart will integrate genomics into educational settings to understand the interplay between genes and environments in fostering reading and mathematical competence. Hart's focus on precision education aligns with contemporary approaches to tailor education to individual student characteristics - particularly beneficial for studying learning disabilities and informing educational practices.

Renée J. Miller
New CERC in Data Intelligence, Cheriton School of Computer Science, University of Waterloo $8,000,000
Currently a University Distinguished Professor at Northeastern University, Miller is renowned for her novel work in data systems, specifically in data integration. As the CERC in Data Intelligence, Miller will lead research to enhance the trustworthy use of big data for data science and artificial intelligence. Her work will address challenges in data science, focusing on correct, explainable and reproducible data preparation and curation methods. She aims to develop frameworks to document, share and reproduce complex data processes, contributing to valid and unbiased insights from data while promoting equity, diversity and inclusion in data science training.

Interdisciplinary and Health

Jennifer Boger (Adjunct Assistant Professor, Systems Design Engineering)
CIHR/ EU Joint Programme in Neurodegenerative Disease Team Grant: Call for Expert Working Groups, $78,000, "Dementia International expert Group on Interactive Technology (DIGIT)".

An expert group consisting of computer scientists, human-computer interaction researchers, design researchers, ethics experts, and engineers aims to contribute to the trans-national and transdisciplinary research around innovative technologies for people living with dementia. By working with care professionals, people with dementia, and diverse researchers cross-nationally, this study will contribute with best practice guidelines for participatory practice on bringing innovative technologies into the care domain. It will identify cross-cultural factors and take a participatory design approach for working with participants with Alzheimer's disease and dementia broadly.

Laura E. Middleton (Kinesiology and Health Sciences, University of Waterloo), **William A. Heibein** (University of Waterloo), **Saskia N. Sivananthan** (Affiliate Professor, McGill University), **Carrie A. McAiney** (School of Public Health Sciences, University of Waterloo)
Weston Family Foundation/CIHR Operating Grant: Brain Health and Reduction of Risk for Age-related Cognitive Impairment: Knowledge Synthesis and Mobilization, $100,000, "Beyond dementia prevention: Understanding Impact and Knowledge Gaps related to Lifestyle Interventions for People with Dementia."

This project will identify and summarize research related to the effectiveness of healthy lifestyle interventions for people with dementia. It will focus on the outcomes that people with dementia and their families have said are most important: functional independence and quality of life. The results of this project will be the basis for lifestyle recommendations for people with dementia and their families, dementia service organizations, and policy makers.

NSERC Alliance
- NSERC Alliance grants provide funds to Canadian university researchers working in partnership with international collaborators from the academic sector.
- **2 University of Waterloo NSERC Alliance grants in this November - December, 2023:**

John-Pierre Hickey (Department of Mechanical and Mechatronics Engineering).
Catalyst Grant- "Clustering dynamics of particles on our turbulent waterways"- $25,000.

Kevin Musselman (Department of Mechanical and Mechatronics Engineering).
Collaboration Grant- "NSERC-DFG SUSTAIN: Integrated development of sustainable solvent strategies for perovskite solar cells"- $300,000.

Awards and Distinctions

Amir-Hossein Karimi (Electrical and Computer Engineering)
Silver Medal of ETH (Eidgenössische Technische Hochschule) Zurich
Outstanding doctoral theses are honoured with the Silver Medal of ETH Zurich and a financial sum.

Anita Layton (Applied Math)
Education Foundation Award of Merit, Federation of Chinese Canadian Professionals.
The Award of Merit, which was established in 1985, is given once annually to "distinguished Chinese Canadians with outstanding professional achievements."

David Hammond (School of Public Health Sciences)
2023 Trailblazer Award in Science for Policy - Canadian Science Policy Centre.
CSPC is a non-profit organization with a diverse science and innovation policy community who contribute to the well-being of Canadians through inclusive and effective science policy. The Trailblazer Award recognizes individuals who spearhead positive and significant change in Canadian science, technology and innovation.

IEEE Fellows IEEE Fellow is a distinction reserved for select IEEE members whose extraordinary accomplishments in any of the IEEE fields of interest are deemed fitting of this prestigious grade elevation.

- Alfred Yu (Electrical and Computer Engineering), 2024 IEEE Fellow
- John Yeow (Systems Design Engineering), 2024 IEEE Fellow

Ellsworth Ledrew (Distinguished University Professor Emeritus, Geography and Environmental Management)
Massey Medal, Royal Canadian Geographic Society.
The Massey Medal was established to honour those who have contributed to the exploration, development, or description of Canada's geography.

Joanne Atlee (Cheriton School of Computer Science)
Most Powerful Women: Top 100 Award Winners – STEM.
These are women who personify what it means to be powerful through the way they empower and champion others, influence change and stand up for all. As Top 100 winners, these individuals stand among more than 1,500 powerful leaders across Canada who share that honour.

Solomon Tesfamariam (Civil and Environmental Engineering)
Leading Innovator - Coalition of Innovation Leaders Against Racism (CILAR).
This award recognizes Black, Indigenous and People of Colour who positively impact their communities, the world and future generations through the innovation ecosystem.

Stephen Evans (Earth and Environmental Sciences)
2023 Schuster Medal, Association of Environmental and Engineering Geologists (USA) and the Canadian Geotechnical Society.
The Schuster Medal is awarded to an individual who displays excellence and innovation in geohazards research while making significant contributions to public education regarding geohazards.

Web of Science Highly Cited Researchers 2023

- Highly Cited Researchers™ are influential researchers at universities, research institutes and commercial organizations around the world who have demonstrated significant and broad influence in their field(s) of research.
- The evaluation and selection process draws on data from the Web of Science™ citation index, together with analysis performed by bibliometric experts and data scientists at the ISI at Clarivate™.
- Of the world's population of scientists and social scientists, Highly Cited Researchers™ are 1 in 1,000.

Name	Title	Department	Second Title/ Research Focus
Dr. Zhongwei Chen	Professor	Chemical Engineering	Research in advanced materials for clean energy.
Dr. Geoffrey T. Fong	Professor	Psychology	Research in international tobacco control policies.
Dr. Michael Fowler	Professor	Chemical Engineering	Research in the electrochemical power sources in vehicles.
Dr. Sharon I. Kirkpatick	Associate Professor	School of Public Health Sciences	Research in the intersections between nutrition, human and planetary health, equity, and policy.
Dr. Juewen Liu	Professor	Chemistry	Research in the fundamental principles of chemistry, physics and biology to produce nanoscale materials, devices and systems.
Dr. Linda F. Nazar	Professor	Chemistry	Research in the development of electrochemical energy storage devices and materials.
Dr. Will Percival	Professor	Physics and Astronomy	Research in properties of the Universe on the largest scales.
Dr. Daniel Scott	Professor	Geography and Environmental Management	Research in the transition to a low carbon tourism economy and adaptation to the complex impacts of a changing climate.
Dr. Xuemin (Sherman) Shen	Professor	Electrical and Computer Engineering	Research in network resource management, wireless network security, Internet of Things, AI for networks and vehicular networks.
Dr. Aiping Yu	Professor	Chemical Engineering	Research in materials development for energy storage and conversion, photocatylsts, and nano composites.
Quanquan Pang	Waterloo alumnus	Chemical Engineering	Research in the fundamental understanding of electrochemical behavior of rechargeable batteries.
Gaoran Li	Former Waterloo Post-Doctoral student	Chemical Engineering	Research in advanced materials and energy storage.

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Waterloo Ventures

Five (5) start-ups with Waterloo alumnus founders and/or co-founders, and launched through Velocity, made the 2023 Forbes 30 Under 30 List.

Category: Healthcare
MedMe Health
Rui Su, co-founder of MedMe (BSc-PharmD, 2018) Health, transforms pharmacies into community health hubs through its software, facilitating the management of clinical services such as vaccinations and chronic disease care. The company has served over more than 25 million patients in 4,000 pharmacies in Canada.

Category: Consumer technology
Tempo Labs
Toronto-based Tempo Labs, established in May 2023 by co-founders Peter Gokhshteyn (BASc- 2018) and Kevin Michael (BASc- 2018), simplifies web app development using AI tools for code generation and layout design through text-based prompts. The startup secured $1.2 million in funding from Y Combinator and General Catalyst.

Category: Science
Coastal Carbon
Co-founded by Kelly Zheng (BASc-2019, PhD-in progress) and Thomas Storwick (BASc- 2019 and MCSc- in progress) out of Velocity, utilizes AI models to assess seaweed growth in specific regions through satellite images, empowering seaweed farmers to claim carbon credits. The company anticipates $2 million in revenue this year.

Category: Social impact
Nfinite Nanotech

Co-founder, Chee Hau Teoh (MASc- 2020) develops nanocoatings that redefine barrier performance, enabling the production of compostable and recyclable packaging at a commercial scale by collaborating with consumer-packaged goods companies like PepsiCo. Teoh envisions broader applications for Nfinite nanotech's technology, including batteries, solar cells and semiconductors.

Category: Enterprise Technology
LlamaIndex

Simon Suo (BCS-2018) co-founded LlamaIndex after stints at Facebook and Uber. An open-source data framework, LlamaIndex streamlines the creation of large language model-based apps. The framework has more than 600,000 monthly downloads, leading to an $8.5 million seed round investment this year.

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International Outreach Trips

Japan and South Korea - October 2023 - The Associate Vice President International (AVPI) made an international education and research partnership development trip that included stops at: Tohoku University, the National Institute for Informatics, Tokyo University, Tokyo Institute of Technology, the Ministry of Education, Culture, Sports, Science and Technology**,** and the Japan Science & Technology Agency. The stop in South Korea was at the Korea Advanced Institute of Science and Technology.

South Africa, Kenya and Ghana, December 2023 - A Presidential trip, which included the AVPI included stops at: the University of Western Cape, mRNA Vaccine Hub for Africa, University of Cape Town, Stellenbosch University, University of Pretoria, the Department of Science and Innovation, National Research Foundation, the Science Forum (all South Africa). In Kenya, the team visited Aga Khan University, The International Development Research Centre, Kenyatta University, Strathmore University and the University of Nairobi. Stops in Ghana included; Ashesi University, African Institute for Mathematical Sciences & Ministry of Education, University of Ghana, International Development Research Center, and the Ministry of Environment, Science, Technology, & Innovation.
Throughout this trip there was a high priority upon research and how graduate students can be effective agents of international collaboration in higher education.

International Delegations Hosted
University of Twente, The Netherlands - October, 2023 - The Centre for Bioengineering and Biotechnology (CBB) and the Health Initiatives Office at the University of Waterloo co-hosted a delegation from the University of Twente as part of the University of Waterloo led symposium "Perspectives on the intertwinement between human and planetary health." The symposium highlighted and emphasized the strategic value of the Waterloo-Twente partnership (formalized in July 2022) and ways to facilitate connections and collaborations. The symposium also featured research talks from both universities in the areas of Planetary Health, AI for Health, Mental Health.

University of Strathclyde, Scotland- November, 2023 - The delegation, led by Vice-Chancellor and Principal, Sir Jim McDonald, consisted of Deans from three of Strathclyde's Faculties, as well as leadership from internationalization, commercialization, and secretariat parts of the University of Waterloo. The purpose of the trip was to discuss higher education collaboration work as it relates to impact.

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University of Waterloo

Office of the Vice-President, Academic and Provost

For Information   **Open Session**

To: **Senate**

Sponsor: James W.E. Rush, Vice-President, Academic and Provost
Contact Information: provost@uwaterloo.ca

Presenter: James W.E. Rush, Vice-President, Academic and Provost
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Date of Meeting: **November 27, 2023**

Agenda Item Identification: **19. Report of the Provost – Faculty Appointments, Leaves**

Summary:

The Faculty Reports for Senators' information regarding the variety of appointments, reappointments, special appointments, leaves, and other matters of interest about individuals in the Faculties are available at the Senate agenda page[1].

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[1] https://uwaterloo.ca/secretariat/sites/default/files/uploads/documents/january-faculties-all.pdf

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