

UNIVERSITY OF
WATERLOO



Senate

November 25, 2024

3:30 p.m.

Needles Hall

NH 3407

Waterloo Campus

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Meeting Book - Senate Meeting 2024-11-25

AGENDA

3:30 p.m.	1. Territorial Acknowledgement		
	2. Approval of the Agenda and Minutes		
	2.1 Conflict of Interest	Declaration	
	2.2 Approval of the Agenda, and Approval of the Consent Agenda	Decision	
	2.3 Minutes of the October 21, 2024 meeting - open and confidential	Decision	
	2.4 Business Arising from the Minutes		
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3:40 p.m.	3. Report of the President	Information	
	3.1 General Update	Information	
	3.2 Statement on Institutional Neutrality and Communications	Information	9
4:00 p.m.	4. Report - Senate Graduate & Research Council, and Senate Undergraduate Council	Decision	
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4:05 p.m.	5. Report of the Vice-President, Academic and Provost		
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	7. Items Removed from Consent Agenda		

	8. Other Business	Input	
4:15 p.m.	CONFIDENTIAL SESSION Senators, Vice-Presidents, Secretariat and Technical Staff as required		
	9. Minutes - Confidential Session		
	9.1 Minutes of the October 21, 2024 Meeting		47
	9.2 Business Arising from the Minutes	Information	
4:20 p.m.	10. Report - Honorary Degrees Committee	Decision	
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	11. Other Business	Input	
	12. Adjournment		

For Information

Open Session

To: Senate

From: Gen Gauthier-Chalifour, University Secretary

Agenda Item Identification: **2. Approval of the Agenda and Minutes**

2.1 Conflict of Interest

Senators are invited to declare any conflicts related to the open session agenda at this time. Should a conflict of interest arise during discussion, senators are asked to declare a conflict of interest as it arises.

The Secretariat can provide guidance regarding potential conflicts of interest in advance of or during the Senate meeting.

2.2 Approval of the Agenda, and Approval of the Consent Agenda

Motion: To approve the agenda as presented/amended, and to approve or receive for information the items on the consent agenda, listed as items 6.1-6.5 of the Senate agenda.

Senators wishing to have an item removed from consent to the regular agenda are asked to contact the University Secretary in advance of the meeting. Senators may also request to have items moved to the regular agenda immediately prior to the approval of the agenda.

2.3 Minutes of the October 21, 2024 Meeting – open and confidential

Motion: To approve the minutes of the October 21, 2024 meeting (open session), and to approve the minutes of the October 21, 2024 meeting (confidential session), as distributed/amended.

Documentation Provided:

- Minutes of the October 21, 2024 Meeting – Open Session
- Minutes of the October 21, 2024 Meeting – Confidential Session (see item 9.1 of the confidential agenda)

2.4 Business Arising from the Minutes

There are no items of business arising.

University of Waterloo
Senate
Minutes of the October 21, 2024 meeting
[in agenda order]

Present: John Abraham, Nasser Abukhdeir, Marc Aucoin, Veronica Austen, Jordan Bauman, Jean Becker, Andrew Chang, Martin Cooke, Cecilia Cotton, Kim Cuddington, Hans De Sterck, Laura Deakin, Charmaine Dean, David DeVidi, Catherine Dong, Mark Ferro, Paul Fieguth, Genevieve Gauthier-Chalifour (Secretary), Mark Giesbrecht, Vivek Goel (Chair), Rob Gorbet, Mike Grivicic (Associate Secretary), Vikas Gupta, David Ha, Peter Hall, Kevin Hare, Neela Hassan, Chris Houser, Natalie Hutchings, Nadine Ibrahim, Narveen Jandu, Marc Jerry, Acey Kaspar, Achim Kempf, Veronica Kitchen, Scott Kline, Sachin Kotecha, Christiane Lemieux, Ondrej Lhotak, Lili Liu, Brad Lushman, Shana MacDonald, Ellen MacEachen, Carol Ann MacGregor, Blake Madill, Colleen Maxwell, Kristiina Montero, Richard Myers, Cathy Newell Kelly, Christopher Nielsen, James Nugent, Troy Osborne, Everett Patterson, Nicholas Pellegrino, Nicholas Pfeifle, David Porreca, Neil Randall, Jacinda Reitsma, Mary Robinson, James Rush, John Saabas, Beth Sandore Namachchivaya, Rida Sayed, Asher Scaini, Mark Seasons, Marcus Shantz, Siva Sivoththaman, James Skidmore, Christopher Taylor, Alexie Tcheuyap, Sharon Tucker, Diana Vangelisti, Johanna Wandel, Mary Wells, Stanley Woo, Clarence Woudsma, Changbao Wu, En-Hui Yang

Guests: Graham Brown, Aldo Caputo, Ashley Day, Nenone Donaldson, Bernard Duncker, Melanie Figueiredo, Jenny Flagler-George, Anne Galang, Diana Goncalves, Sarah Hadley, Diane Johnston, Andrea Kelman, Jennifer Kieffer, Nick Manning, Jon Mason, Eleanor McMahon, Norah McRae, Christine McWebb, Ian Milligan, Fayaz Noormohamed, Donna Rheams, Karl Schuett, Daniela Seskar-Hencic, Allan Starr, Brandon Sweet, Nickola Voegelin, Tim Weber-Kraljevski, Roly Webster, Tom Willett, Sarah Willey-Thomas, Kate Windsor, Katy Wong-Francq

Regrets: Bilal Ahmed, Avery Akkerman, Aubrey Basdeo, Judy Castaneda, Teresa Fortney, Murray Gamble, Jennifer Lynes Murray, Stephanie Maaz, Peter Meehan, Kirsten Muller, Jagdeep Singh Bachher, Sivabal Sivaloganathan, Katie Traynor

OPEN SESSION

The chair welcomed all in attendance to the meeting. The secretary provided a brief overview of the meeting room technology as well as for the governance portal.

1. Territorial Acknowledgment

Nasser Abukhdeir provided the territorial acknowledgement and a personal reflection, and asked that a report be circulated to senators.

Following the territorial acknowledgement, the chair provided opening remarks: welcome to two new Senators; thanks to staff who supported Waterloo's presence at the recent Ontario Universities Fair; upcoming convocation ceremonies on October 25-26; groundbreaking ceremony for the new Mathematics 4 building to take place on Monday October 28.

2. Approval of the Agenda and Minutes

2.1 Conflict of Interest. No conflicts of interest were declared.

2.2 Approval of the Agenda, and Approval of the Consent Agenda. Members agreed by consensus to allow recording of the meetings proceedings for item 4. 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 10-16 of the Senate agenda. Patterson and Deakin. Carried.

2.3 Minutes of the September 23, 2024 Meeting. A motion was heard to approve the minutes as presented. Giesbrecht and Ibrahim. Carried.

2.4.1 Approved appointments to Senate committees/councils by Senate Executive Committee. This item was received for information.

2.4.2 Update on Task Forces: Principles for Institutional Partnerships and Social Responsibility in Investing. This item was received for information.

3. Faculty Update Presentation [Science]

Chris Houser provided a presentation. Success metrics for students/alumni and research funding/awards. Theme of discovery and exploration with focus on three broad categories of scholarship - health and biomedical, sustainable materials and sensing, and environment and ecology. Recent organizational changes to support advancement and communication functions, and adjustment to associate dean portfolios to align with priority areas. Promotion of Science offerings to prospective incoming students, and support/expansion of student offerings toward an outstanding student experience. Members clarified that additional support for undergraduate student research aims to support supervisors broadly and that these funds may free up external research funding that could be deployed to other areas.

4. Deans' United Way Presentation

The Faculty deans and senior administrators executed a masterful line dance to bring awareness to the University's annual United Way campaign and were joined by some senators. Eleanor McMahon, Vice-President University Relations, thanked the deans and conveyed that the University hopes to surpass the goal of \$230,000 raised for United Way last year. The chair underscored the importance of this campaign, noting that even though the University and its members are facing financial challenges there are many in the community facing even greater challenges and to consider supporting those who are in need.

5. Report of the President

Goel provided a verbal report on recent events/announcements:

- Announcement of new student permit caps for international students along with new requirements for attestation letters for international graduate students, in parallel with other announcements that have caused churn and confusion, are conveying a message that Canada is a less welcoming destination for international students
- Additionally, new tensions between the governments of Canada and India will complicate international recruitment efforts
- The province's announcement of new compliance requirements (with short timelines to completion for some requirements) will divert resources within the institution to fulfill externally imposed requirements

6. Report - Senate Graduate & Research Council

Woudsma provided an overview of the recommendation and highlighted that this is brought forward as a joint initiative of three departments. Members discussed the recommendation. This proposal broadens engineering offerings beyond the existing departmental structures. Students' home department obtains a portion of funds; however this program is largely administered via the Department of Systems Design Engineering. Offering this program is expected to provide a net addition to student complement. Chemical Engineering was involved in the initial development but bowed out of this proposal due to prospective costs, though faculty in that department may still be involved e.g. graduate supervision. A motion was heard that Senate approve the proposed new academic programs of Doctor of Philosophy (PhD) and research-based Master of Applied Science (MASc) degrees in Biomedical Engineering (BME), as presented; and, that the effective date be either January 1, 2025 or May 1, 2025, to be confirmed and subject to the date of review and approval by the Ontario Universities Council on Quality Assurance and the Ministry of Colleges and Universities. Woudsma and Wells. Carried.

7. Report - Senate Undergraduate Council

Senate agreed to take items 7.1 and 7.2 together, and DeVidi provided an overview of each item. Two motions were heard as follows:

To approve the proposed major modification to create a new option, Quantum Information (Bachelor of Computer Science, Bachelor of Computing and Financial Management, Bachelor of Mathematics, Bachelor of Software Engineering), effective September 1, 2025, as presented.

To approve the proposed academic regulation revisions to Mathematics: Averages and Academic Standings, Addition of First Term Withdrawal Policy, effective September 1, 2025, as presented.

DeVidi and Giesbrecht. Both motions were carried.

8. Report - Senate Executive Committee

8.1 Guidelines for Visitors to Senate Meetings. Senate heard that work on these guidelines began in the spring months at the direction of Senate Executive Committee (SEC), with iterative drafts reviewed by the same committee. This document reflects existing practices as well as following best practices among comparator institutions, as well as having parallels with similar practices adopted at various level of governments. The registration process proposed under section 3 would be developed by the Secretariat and shared with SEC.

A motion was heard that Senate adopts the Guidelines for Visitors to Senate Meetings as presented. Deakin and Aucoin.

Members discussed the draft guidelines. Meeting accessibility is especially important, and registration process for visitors should be simple and allow people to easily walk in when room capacity is not an issue. Concern that any barriers could impact community participation and add unnecessary work when resources can be devoted to other priorities. This proposal comes following a review of comparator institutions' practices. The resources costs to implement this proposal are relatively small in comparison to the resources costs that may arise without having such guidelines, and this proposal fosters transparency for visitors and calibrates expectations for senators. Some senators felt that registration of visitors is not necessary, and could run afoul without consultation with Equity, Diversity, Inclusion & Anti-Racism (EDI-R) Office and the Office of Indigenous Relations. It was noted that guidelines such as these can help to reduce the incidence of bad actors, based on some senators' experiences with municipal governance.

Gauthier-Chalifour clarified that the guidelines do not intend to preclude engagement or to turn people away, and that those who do not want to sign in to a meeting will not be turned away on that basis. Further consultation can occur with the two offices.

A motion was heard to defer consideration of the guidelines pending additional consultation with the Equity, Diversity, Inclusion & Anti-Racism (EDI-R) Office and the Office of Indigenous Relations. Abukhdeir and De Sterck.

Members discussed the secondary motion to defer. Some members felt deferral was unnecessary, and that Senate can adjust any processes over time as experience informs the application of the guidelines. Some members expressed concern that the guidelines may have a chilling effect on deliberation at Senate, and that there is merit in deferring consideration so that marginalized populations are not deterred from engagement. It was noted that many in the community do not know how to engage with Senate, and that the guidelines would have a positive effect to provide those people with a starting point.

The question on the deferral motion was called, and the motion was defeated.

Senate resumed consideration of the main motion, and the secretary noted that the registration process for visitors would be brought forward to SEC. The chair confirmed for the record that consultation would include Equity, Diversity, Inclusion & Anti-Racism (EDI-R) Office and the Office of Indigenous Relations, along with WUSA and GSA, and that the document would be available for Senate as part of a report from SEC.

The main motion was carried.

8.2 Senate Undergraduate Council – Report on Curriculum Subcommittee Pilot. DeVidi spoke to the report and recommendation, noting that the pilot was successful, and that the subcommittee's work has been seen to free up bandwidth for the Council to focus more attention on items of strategic importance. A friendly amendment was accepted by the mover and seconder to provide that the student member on the subcommittee may be drawn from any student senator or any student member of a Senate committee. A motion was heard that Senate approve the establishment of a curriculum subcommittee for Senate Undergraduate Council, as amended. DeVidi and Deakin. Carried.

8.3 Election to Senate Committee. A motion was heard to elect Neela Hassan as the graduate student member of the Academic Quality Enhancement Committee. Pellegrino and Patterson. Carried.

9. Report - Senate Finance Committee

9.1 Mid-Year Update, 2024/25 University Operating Budget. James W.E. Rush provided a presentation to Senate to convey budget developments and to keep Senate informed on progress in dealing with the deficit through in-year measures. Rush illustrated further context surrounding the briefing note provided in advance. Rush reminded Senate of the measures proposed in the opening budget to address the in-year deficit and discussed emerging developments. The University will hold a town hall event in November pertaining to the budget.

Members discussed the operating budget mid-year update. There is significant demand for Waterloo's academic programming, but this demand is not supported with sufficient funding from the province. Funds carried forward from previous years within certain accounts of the operating budget may be accessed to mitigate the current year's deficit, though much of the funds carried forward within the University's various accounts are dedicated to specific purposes and may not be applied to the operating budget. Many faculty and staff within the community are hazy on the budget situation, and communication will be important to engage the community, particularly to convey the situation transparently and to mitigate rumours taking the place of verified information in the absence of communication. Goel and Rush observed that the decentralized nature of Waterloo will mean that the decisions of multiple individuals in charge of their own budgets will be consolidated toward mitigating the overall budget deficit, and that the town hall and the separate budget education session in the winter term will aim to foster communication of the budget situation to the community.

CONSENT AGENDA

Consent agenda items were handled under item 2.2 of the agenda.

10. Senate Work Plan

Received for information.

11. Report - Senate Graduate & Research Council

Received for information.

12. Report - Senate Undergraduate Council

Received for information.

13. Report - Senate Long Range Planning Committee

Received for information.

14. Report - Honorary Degrees Committee

Received for information.

15. Report - Vice President, Research & International

Received for information.

16. Report - Vice-President, Academic & Provost

Received for information.

17. Other Business

There was no other business.

With no other business, the committee convened in confidential session.

October 28, 2024

Mike Grivicic
Associate University Secretary

Office of the President**For Information****Open Session****To:** Senate**Sponsor/Presenter:** Vivek Goel, President and Vice-Chancellor
Contact Information: president@uwaterloo.caChristine McWebb, Associate Vice-President, Faculty Planning and Policy
cmcwebb@uwaterloo.ca**Date of Meeting:** November 25, 2024**Agenda Item Identification:** 3.2 Statement of Institutional Neutrality and Communications**Highlights:**

This report is provided to Senate for information to share the Statement on Institutional Neutrality and Communications in response to the Freedom of Expression & Inclusive Engagement Task Force recommendations.

Jurisdictional Information:

This statement was developed in response to Recommendation #1 from the Freedom of Expression & Inclusive Engagement Action Plan:

Recommendation #1:

- *Develop a statement, based on the principle of institutional neutrality, that (a) clarifies the reasons why it is important the president, provost, other senior administrators, deans, and authorized spokespersons avoid speaking and taking positions on social, political, or moral matters on behalf of the University; and (b) articulates the conditions that would warrant these individuals, speaking on behalf of the University, addressing social, political, or moral matters.*

Internal Consultation Path:

Deans' Council – October 30, 2024
Council of Academic Leaders – November 2, 2024
Executive Council – November 7, 2024
Senate – November 25, 2024

Next Steps:

Publication and communication to the campus community

Documentation Provided:

- Statement on Institutional Neutrality and Communications

Statement on Institutional Neutrality and Communications

At Waterloo, it is [our mission](#) to advance learning and knowledge through teaching, research, and scholarship. To do this, we must foster a vibrant culture of intellectual exchange, academic freedom, open inquiry, free expression, and inclusive engagement.

In line with the report of the [Task Force on Freedom of Expression and Inclusive Engagement](#), the University of Waterloo affirms that institutional neutrality is a critical principle in fostering this environment.

The importance of institutional neutrality

There are times, often in response to local or global events, that members of our diverse community expect, or call on, the institution and its leaders to communicate a public perspective, viewpoint, or stance on political, social, or moral matters. Defining an institutional position on such matters that expresses a viewpoint representative of its entire community of members is not easily done. Furthermore, if senior leaders take positions on behalf of the institution, they risk inhibiting the free expression of diverse views across campus.

The University recognizes that local and global social, political, and moral issues are integral to public discourse and are often central to the research, teaching, and scholarship of our community members.

The expression of diverse views and the advancement of debate are the domain of the institution's individual members, not of the institution itself. It is the institution's role to foster an environment for our students, faculty and staff to fulfil our mission and provide our faculty, staff and students with appropriate support and resources.

Adopting a position of institutional neutrality allows us to safeguard our mission and ensure that the University remains a place where individuals can engage freely and robustly with ideas from all perspectives, without the chilling effect that may result from institutional endorsement of a particular view. As the members of the Kalven Committee at the University of Chicago noted in 1967, "the university is the home and sponsor of critics; it is not itself the critic."

Adopting the principle of institutional neutrality has important implications for how the University communicates on local and global events and issues. Our communication practices must reflect this principle while ensuring that all members of our community feel a sense of belonging and are empowered to engage in open and inclusive dialogue. Neutrality goes hand-in-hand with inclusive engagement as freedom of expression extends to everyone in our community.

Conditions for institutional statements

Adopting a position of institutional neutrality means the University will not issue statements or communications that take a position on broader social, political, and moral matters.

The University may issue statements that have social, political, and moral effect related to its mission, threats to free expression and academic freedom, or its responsibilities to provide safe campuses. The circumstances in which the University, will consider statements or communications include:

- **Threats to academic freedom or free expression.** When the University's fundamental values of academic freedom, open inquiry, or free expression are directly challenged, it may be necessary to articulate a clear institutional stance.
- **Matters related to the University's mission.** When social or political developments have a direct impact on the University's ability to fulfill its mission of advancing knowledge and fostering research and scholarship, it may be necessary for the University to respond.
- **Risk to public safety and well-being.** In circumstances where the safety and well-being of our campus community are at risk, the University must address those concerns.

Such statements will be carefully considered to ensure that they remain consistent with the University's mission, values, and commitment to fostering open dialogue.

Maintaining support through communication

It will remain our objective to convey a sense of caring for people in our community who are affected by, or feel the harms of, local and world events. Our communications will focus on providing our community information to access the supports we offer for mental health, financial aid, academic supports, through the appropriate offices.

In accordance with its [obligations under the Ontario Human Rights Code](#), the University will continue to proactively communicate and create activations or events that support the prevention of discrimination for grounds protected under the code.

The University of Waterloo is unwavering in its commitment to free expression and academic freedom. These principles are the bedrock of our intellectual community and are vital for robust scholarly inquiry.

We encourage all members of the University to engage in discussions on social, political, and moral issues. In doing so, we ensure that our campus remains a vibrant and inclusive environment for learning, where ideas can be explored, debated, and contested without fear of institutional bias.

Senate Graduate & Research Council and Senate Undergraduate Council

For Approval

Open Session

To: Senate

Sponsors:

Charmaine Dean
Vice-President, Research & International

David DeVidi
Associate Vice-President, Academic

Clarence Woudsma
Interim Co-Associate Vice-President, Graduate Studies and
Postdoctoral Affairs

Presenter:

David DeVidi

Contact Information:

david.devidi@uwaterloo.ca

Date of Meeting:

November 25, 2024

**Agenda Item
Identification:**

**4.1 Joint Report – Senate Graduate & Research
Council and Senate Undergraduate Council:
Academic Calendar Dates for 2025-26**

Recommendation/Motion:

To approve the 2025-2026 academic calendar dates and calendar guidelines for establishing academic dates, as presented.

Summary:

[Senate Graduate & Research Council](#) will meet on November 18, 2024 and [Senate Undergraduate Council](#) will meet on November 19, 2024. Subject to approval by both Councils, this item will be forwarded to Senate for approval.

Jurisdictional Information:

This item is being submitted to Senate in accordance with [Senate Bylaw 2](#), section 4.03(a): "Make recommendations to Senate with respect to the governance, direction and management of, or any changes in rules, regulations or policies for graduate studies and research in the university." 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:

Senate Graduate & Research Council approval date (mm/dd/yy): 11/18/24

Senate Undergraduate Council approval date (mm/dd/yy): 11/19/24

Highlights/Rationale:

The dates lay out major academic milestones throughout the year and provide guidance to units throughout the campus community as they conduct academic planning within their respective areas.

Documentation Provided:

Appendix A – 2025-2026 Academic Calendar Dates and Calendar Guidelines for Establishing Academic Date

Academic Calendar Dates, 2025-2026

	Fall 2025	Winter 2026	Spring 2026
Co-operative Work Term Begins	Sept. 2 (T)	Jan. 5 (M)	May 11 (M)
Classes Begin	Sept. 3 (W)	Jan. 5 (M)	May 11 (M)
Holidays	Oct. 13 (M)	Feb. 16 (M) Apr. 3 (F)	May 18 (M) July 1 (W) Aug. 3 (M)
Reading Week	Oct. 11-19 (S-U)	Feb. 14-22 (S-U)	N/A
Convocation	Oct. 24, 25 (F,S)	N/A	June 16-20 (T-S)
Classes End	Dec. 2 (T)	Apr. 6 (M)	August 5 (W)
Make-up Day(s) for in-term holidays	N/A	Apr. 6 (M) for Apr. 3 (F schedule)	Aug. 4 (T) for May 18 (M schedule) Aug. 5 (W) for July 1 (W schedule)
Pre-Examination Study Day(s)	Dec. 3, 4 (W, R)	Apr. 7, 8 (T,W)	Aug. 6 (R)
Examinations Begin	Dec. 5 (F)	Apr. 9 (R)	Aug. 7 (F)
In-Person Exam Days for Online Courses	Dec. 5, 6 (F,S) Dec. 10, 13 (W,S)	Apr. 10, 11 (F,S) Apr. 15, 18 (W,S)	Aug. 7, 8 (F,S) Aug. 12, 15 (W,S)
Examinations on Sunday	Dec. 7 (U)	N/A	N/A
No Exams on the Following Days	Dec. 14 (U)	April 12 (U) Apr. 19 (U)	Aug. 9 (U) Aug. 16 (U)
Examinations End (including Emergency Day)	Dec. 19 (F)	Apr. 24 (F)	Aug. 20 (R)
Co-operative Work Term Ends	Dec. 19 (F)	Apr. 24 (F)	Aug. 21 (F)
Teaching days	60	60	60
Pre-examination Study Day(s)	2	2	1
Examination days	13 (+1 Emergency Day)	13 (+1 Emergency Day)	11 (+1 Emergency Day)

Symbols and abbreviations:

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

Guidelines for Determining Academic Calendar of Dates

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

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

- If May 1st is a Wednesday, then start of classes is Monday, May 6th.
 - If May 1st is a Thursday, then start of classes is Monday, May 5th.
 - If May 1st is a Friday, then start of classes is Monday, May 11th.
 - If May 1st is a Saturday, then start of classes is Monday, May 10th.
10. That there be no fewer than one pre-examination study day and when possible, two pre-examination study days (excluding Saturday, Sunday, and holidays) between the end of classes and the beginning of examinations. A clear rationale for using fewer than 2 days or Saturday, Sunday, and holidays as pre-examination study days, must be communicated to Senate at the time calendar dates are approved.
 11. That there be no fewer than 13 examination days in the Fall and Winter Terms, and 11 examination days in the Spring Term. In addition, one Emergency Day with no scheduled examinations is added to the end of the examination period.
 12. In calculating examination days, Saturdays which fall within the period are included, whereas Sundays and statutory or University holidays are excluded.
Exceptions:
 Examinations will not be scheduled on the Saturday following Good Friday when that day falls within the examination schedule or the Saturday of the Civic Day weekend.
 The first Sunday within the examination period may be used when required to accommodate the prescribed number of examination days in the Fall Term.
 13. That in the Fall Term no examinations be scheduled beyond December 22nd. The Emergency Day cannot be scheduled beyond December 23rd.
 14. That Online Course Examination Days in each term be the first consecutive Friday and Saturday and the second consecutive Wednesday and Saturday in the examination period.
 15. Grades due dates for on campus courses that have a scheduled final examination are normally scheduled seven days from the date of the final examination. Grades for online courses that have a scheduled final examination are due on the last day of the grades submission period. Grades for all courses without a scheduled final examination are normally due 14 days after the start of examinations.
 16. Co-op work terms are expected to be 16 week in duration. Actual start and end dates may vary depending on employer or student requirements in consultation with Co-operative Education.

Rules that Require Exceptions with Rationale:

Rule 10

...That there be no fewer than one pre-examination study day and when possible, two pre-examination study days (excluding Saturday, Sunday, and holidays) between the end of classes and the beginning of examinations. A clear rationale for using fewer than 2 days or Saturday, Sunday, and holidays as pre-examination study days, must be communicated to Senate at the time calendar dates are approved.

In order to accommodate Online Course Examination Days early in the spring term exam schedule to ensure that grades from online courses are submitted before or on the deadline, only one study day is possible for the 2026 spring term.

Rule 12

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

With fall term classes beginning September 3, 2025, and the scheduling of two study days prior to the fall final exam period, the first Sunday within the exam period was required for scheduling exams to accommodate the prescribed number of examination days.

Prepared by:
C. Newell Kelly, Registrar
July 2024

For Information**Open Session**

To:	Senate
Sponsor:	James W. E. Rush, Vice-President, Academic and Provost
Contact Information:	provost@uwaterloo.ca
Presenter:	David DeVidi, Associate Vice-President, Academic
Contact Information:	david.devidi@uwaterloo.ca
Date of Meeting:	November 25, 2024
Agenda Item Identification:	5.1 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 September 1 2023 to August 31 2024. In response to feedback from Senate last year, the report includes information provided to Senate for the nine years prior to facilitate discussion of trends over time.

The numbers reported in the attached chart include findings of guilt for graduate and undergraduate students at the University and faculty level 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.

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 (1887) is the most frequent offence, followed by the second most reported offence – plagiarism (1690); it is noteworthy that the boundary between these two categories is not precise. When asked for comments about this data, some Faculties suggested that there is a more recent increase in plagiarism cases, which they attribute to an increase in cases involving inappropriate use of generative artificial intelligence tools.

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 because of the large number of categories available and the sometimes blurry boundaries between the categories there have been inconsistencies in the way particular sorts of action are entered into the various academic offence categories by different Faculties. This obviously affects the accuracy and value of the data in this cumulative report. 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 increase the consistency of how incidents are recorded in the CIS. The working group produced an easy-to-follow Users Guide which should result in greater consistency in the data. It is also worth noting that the CIS is nearing the end of its lifecycle. A working group has been carrying out consultations with stakeholders about desirable features of a new CIS, and an RFP for a new system is underway as of November 2024. The new system will maintain the capacities of the current CIS, and includes additional features that should enhance reporting.

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. While overall numbers of cases have declined since the height of the pandemic, a perceived recent increase in cases involving misuse of Generative-AI tools was commented on by several ADs. A common sentiment was that the University should continue its efforts to develop guidance for instructors and students on a range of Gen-AI related issues: the range of options that instructors might select for the appropriate use of such tools in their courses, depending on the learning objectives of their courses; appropriate design of assessments in the age of Gen-AI; clear communication of expectations around the use of these tools, which often vary from course to course; and a clear understanding of the relationship between the principles of academic integrity and the use of these tools by students.

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: November 11, 2024

Documentation Provided:

- UCSA Annual Report: 2023-2024

UCSA Annual Report: 2023-2024

DISCIPLINE OFFENCE	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
ACADEMIC										
Academic or admission fraud	0	61	88	14	10	0	0	9	16	10
Altering or falsifying a relevant document	0	29	19	13	17	0	4	5	16	20
Cheating	543	512	257	324	553	1340	2394	869	285	433
Contravention of statute	3	0	0	0	0	0	0	0	0	0
Impersonation	9	0	22	38	25	57	14	0	8	4
Misrepresentation	65	96	92	125	88	25	226	74	27	84
Obtaining confidential academic materials	0	0	0	0	0	4	16	4	0	4
Plagiarism	729	853	1441	1477	1619	1922	2198	1710	1226	1690
Theft of intellectual property	22	16	11	53	6	98	405	67	55	40
Unauthorized aids or assistance	53	47	32	56	28	604	1482	409	237	707
Unauthorized co-operation or collaboration	1183	772	740	821	1458	1366	3647	2858	2769	1887
Unauthorized resubmission of work	45	41	20	75	48	12	19	22	8	22
Violation of examination regulations	33	15	11	40	27	159	153	65	1	51
Violation of instructor copyright	N/A	N/A	N/A	N/A	N/A	0	450	186	12	16
Other	8	4	12	12	12	1	83	6	10	9
NON-ACADEMIC										
Contravention of a statute	14	7	3	0	0	0	0	0	0	0
Disruptive, dangerous, aggressive or threatening behaviour	51	39	16	31	21	14	7	9	12	18
Infringing unreasonably on the work of others	6	9	8	9	0	1	0	0	0	10
Mischief	0	2	39	0	0	0	0	30	4	0
Misuse of University resources	10	8	27	1	21	2	0	2	2	3
Theft	20	11	0	0	0	0	0	0	8	5
Unauthorized use of equipment	8	4	3	4	0	0	0	0	0	0
Unethical behaviour	0	52	74	61	5	0	14	2	9	5
Vandalism	N/A	N/A	N/A	N/A	32	0	0	0	4	0
Violation of safety regulations	N/A	N/A	N/A	N/A	N/A	4	401	5	9	0
Other	13	11	13	10	5	10	83	31	4	0

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

Senate Agenda Items · expected *as needed	May 6, 2024	June 10, 2024	September 23, 2024	October 21, 2024	November 25, 2024	January 27, 2025	March 3, 2025	April 7, 2025
	REGULAR AGENDA (including items for information and discussion)							
Minutes	.	.	.	.	.	.	.	.
Business Arising	.	.	.	.	.	.	.	.
LEADERSHIP UPDATES⁶								
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, appointment of members							.	
Delegation of Roster of Graduands								.
Report of Roster of Graduands			.		.			
Convocation Report – summary of this years’ ceremonies					.			
Undergraduate and Graduate Admissions Update						.		
Conduct Self-Assessment Survey ¹							.	
Appointment of COU Academic Colleague	Current appointment runs to April 30, 2025							
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/Unit Updates				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	May 6, 2024	June 10, 2024	September 23, 2024	October 21, 2024 <i>Strategic Plan Annual Update / Waterloo at 100</i>	November 25, 2024	January 27, 2025	March 3, 2025	April 7, 2025
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		•						

Special Topics for 2024-2025 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

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⁶ Leadership updates may include such topics as: Talent, We Accelerate Report, Communities (EDI, Sustainability), Waterloo International, etc.

Senate Graduate & Research Council

For Information

Open Session

To:	Senate
Sponsor:	Charmaine Dean Vice-President, Research & International Clarence Woudsma Interim Co-Associate Vice-President, Graduate Studies and Postdoctoral Affairs
Presenter:	Charmaine Dean
Contact Information:	cdean@uwaterloo.ca
Date of Meeting:	November 25, 2024
Agenda Item Identification:	6.2 Report – Senate Graduate & Research Council

Summary:

[Senate Graduate & Research Council](#) met on October 23, 2024 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 received the Buitrago Opportunity Graduate Scholarship in Engineering [trust] for information.

2. Graduate Awards

Council approved the following graduate award:

- a. Waterloo Clinical Research Ethics Board (CREB) [Terms of Reference Update]

The Council also received three items for information:

- a. A presentation of the Credentials Framework Report
- b. A report on the Freedom of Expression and Inclusive Engagement Taskforce
- c. A presentation of the proposed new CREATE Grant Proposal and Procedures

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.
- 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.

For Information**Open Session****To:** **Senate****Sponsor:** Cathy Newell Kelly, Registrar
Contact Information: cnkelly@uwaterloo.caClarence Woudsma, Interim Co-Associate Vice-President,
Graduate Studies and Postdoctoral Affairs
cwoudsma@uwaterloo.ca**Presenter:** Cathy Newell Kelly, Registrar
Contact Info: cnkelly@uwaterloo.ca**Date of Meeting:** **November 25, 2024****Item Identification:** **6.3.1 Report on Fall 2024 Convocation****Summary:**

At the April 8, 2024 meeting of Senate the following motion was carried:

That Senate delegate its authority for the approval of the roster of graduands jointly to the chair and vice-chair of Senate, for convocation ceremonies scheduled in June 2024 and October 2024, and that Senate direct that a report on the complete roster of graduands be presented for information to the Senate meeting following the relevant convocation.

Congruent with Senate's approval and having been furnished with the lists of graduands for Fall 2024 convocation, on October 17, 2024 the chair and vice-chair of Senate confirmed approval of the lists of graduands as attached to this report.

Assurance Processes for Degree Granting and Validation

The University has implemented a variety of processes and systems to ensure that students receiving a degree have fulfilled the requirements of their respective programs.

i. Degree Granting - Undergraduate

Once a student has submitted their application to graduate, the Registrar's Office works closely with Faculty partners to review and confirm that students have met degree requirements. Both the Faculties and the Registrar's Office review each student record, as well as completing a variety of queries for record- and error- checking. During these reviews the Registrar's Office confirms that:

- Requested program/plan combinations are valid
- The correct number of units are completed

- Required courses are completed
- Co-op/PD requirements are met (where applicable)
- Milestones are completed
- Minimum averages are met
- Student is in a good academic standing

It is only once all these criteria are met that students are coded in Quest as having completed their degrees. Otherwise, students are notified that they do not meet degree requirements and must achieve the missing requirement(s) before they are eligible to graduate.

ii. Degree Granting - Graduate

Once a student has submitted their application to graduate, their home department reviews their record to ensure that:

- The thesis, or research paper (if applicable) is complete and has been approved by the committee and accepted to UWSpace (in the case of a thesis);
- All required courses have been completed and have grades present;
- All overall average and/or program-specific minimum grade requirements are met;
- All milestones have been successfully completed and recorded;
- The requirements for any applicable field, specialization, or type II diploma have also been met; and
- Co-op requirements are met, where applicable.

The department then approves the student to graduate and GSPA staff performs a confirming review to ensure all courses, milestones, and thesis are complete, prior to coding degree completion.

iii. Early Degrees:

To qualify for an early diploma, students must meet one of the following criteria:

- They have a time-sensitive application for a TN (or TN1) Visa. The student must provide their fully- signed US job offer that includes the start date, which can be up to 30 days after their convocation ceremony.
- They have other immigration-related circumstances that require an early diploma. The student must provide proof of requirement or meet with an Immigration Consultant and provide validation of the requirement.
- They have an educational opportunity that requires their diploma (as opposed to evidence of degree completion). The student must provide communication from the academic institution stating the original diploma is a requirement.
- They have a professional opportunity that requires their diploma (as opposed to evidence of degree completion). The student must provide a request from their proposed employer, on their letterhead, that indicates that the diploma is necessary for their appointment.

iv. Degree Validation:

For degree validation The Centre used AuraData, a third-party company with whom the University has engaged for about 20 years. Employers pay a fee to AuraData and the University receives a portion of the revenue. The alumnus provides authorization and then degree verification is given. If there's a discrepancy, (often due to the alumnus using the wrong degree name or using a different name) those situations are directed to The Centre to verify manually.

AuraData processes roughly 90-95% of Waterloo's degree validation requests. The Centre also does some validation through a company called DigiFlow, as well through government Cultural Bureaus. For government requests, the bureau submits their own forms to The Centre and the validation is completed manually.

Documentation Provided:

- Fall 2024 Convocation - Early Degrees Granted, Conferment of Degrees, and Revisions to Conferment of Degrees (full lists available [via external link](#))

For Information

Open Session

To: Senate

From: Secretariat

Agenda Item Identification: 6.3.2 Convocation Overview 2024

Summary

The attached report is brought forward to Senate following the convocation ceremonies of June and October 2024. This report is newly instituted this year, and aims to provide a greater understanding of the magnitude of convocation while also relating detailed metrics of interest to the University community.

The report provides highlights of this years' ceremonies along with high-level data on the degrees awarded with delineation by faculty, by degree/diploma type etc., including for honorary degrees and special awards that are bestowed at convocation. Additionally, some commentary is provided on attendance at the ceremonies (both in-person and online viewers) as well as on participation from the University community to support the success of these ceremonies.

Documentation provided:

- Convocation Overview 2024



CONVOCATION OVERVIEW 2024

Prepared by:

Office of the Registrar
Graduate Studies & Postdoctoral Affairs
Community Relations & Events

November 15, 2024

INTRODUCTION

In 1957, the University of Waterloo opened its doors to 74 engineering students; today, the University boasts a global alumni network spanning over 255,000 alumni in 156 countries.

The University of Waterloo celebrates convocation twice each year, with 14 ceremonies at spring convocation in mid-June, and 5 ceremonies at fall convocation in late October.

This new annual report to Senate provides a summary of undergraduate and graduate degrees awarded in the 2024 calendar year, in total and by faculty. It highlights the contributions of the campus community in achieving the success of spring and fall convocation, including graduand participation rates, guest attendance, faculty participation, and staff ambassadors.

The report is intended to provide increased visibility into this important milestone in the life of UWaterloo students as they become alumni, and to build an increased sense of pride and shared celebration as a campus community. It also allows the convocation team to highlight important changes and celebrations that might be unique to each year's convocation.

2024 HIGHLIGHTS

In 2024, the University of Waterloo awarded 9,352 undergraduate and graduate degrees, including 96 optometrists, 110 pharmacists, and 355 doctorates.

In addition, the University recognized 12 individuals with Honourary Doctorates, 12 individuals as Distinguished Professor Emeritus, and seven Honourary Members of the University.

Spring 2024 marked the end of Dominic Barton's tenure as the eleventh Chancellor of the University. He was installed as Chancellor Emeritus on June 13, 2024. At the first fall convocation ceremony, the University's twelfth Chancellor, Jagdeep Singh Bachher, was installed.

Fall 2024 marked the introduction of a fifth ceremony to accommodate growth in graduates across faculties.

Under the leadership of Graduate Studies & Postdoctoral Affairs, graduate valedictorians were introduced for the first time at fall convocation.

As part of the University's efforts towards truth and reconciliation, changes were introduced to the convocation brand to downplay the prominence of the mace, while continuing to ensure the Eagle Staff has a prominent place in convocation ceremonies.

In response to geopolitical circumstances, including an encampment on campus at the time of spring convocation, 2024 convocation introduced new security elements and risk management plans.

TOTAL DEGREES AWARDED IN 2024

As outlined in the table below, a total of 9,352 degrees were awarded at the University of Waterloo in 2024.

TOTAL DEGREES AWARDED BY FACULTY	SPRING	FALL	2024 TOTAL
Faculty of Arts	1,443	643	2,086
Faculty of Engineering	2,137	460	2,597
Faculty of Environment	482	179	661
Faculty of Health	578	265	843
Faculty of Mathematics	1,274	504	1,778
Faculty of Science	1,002	385	1,387
Total	6,916	2,456	9,352

The following section outlines the specific degrees awarded in each faculty.

FACULTY OF ARTS	SPRING	FALL	2024 TOTAL
Doctor of Philosophy	22	21	43
Master of Accounting	1	209	210
Master of Applied Science	2	6	8
Master of Arts	55	60	115
Master of Catholic Thought	-	1	1
Master of Digital Experience Innovation	30	-	30
Master of Fine Arts	2	2	4
Master of Peace and Conflict Studies	14	2	16
Master of Public Service	48	4	52
Master of Taxation	17	9	26
Master of Theological Studies	2	5	7
Bachelor of Arts (General Program – Three Year)	82	49	131
Bachelor of Arts (General Program – Four Year)	28	22	50
Bachelor of Arts (Honours Program)	668	174	842
Bachelor of Accounting and Financial Management (Honours Program)	324	5	329
Bachelor of Global Business and Digital Arts (Honours Program)	138	12	150
Bachelor of Social Work (Honours Program)	10	62	72
Total	1,443	643	2,086

FACULTY OF ENGINEERING	SPRING	FALL	2024 TOTAL
Doctor of Philosophy	78	50	128
Master of Applied Science	119	75	194
Master of Architecture	24	18	42
Master of Business, Entrepreneurship & Technology	-	42	42
Master of Engineering	264	138	402
Master of Management Sciences	69	27	96
Bachelor of Applied Science	1,485	43	1,528
Bachelor of Architectural Studies (Honours Program)	2	64	68
Bachelor of Software Engineering (Honours Co-operative Program)	96	3	99
Total	2,137	460	2,597

FACULTY OF ENVIRONMENT	SPRING	FALL	2024 TOTAL
Doctor of Philosophy	14	10	24
Master of Arts	9	9	18
Master of Climate Change	10	36	46
Master of Development Practice	11	-	11
Master of Economic Development and Innovation	4	9	13
Master of Environment and Business	7	13	20
Master of Environmental Studies	31	14	45
Master of Planning	5	1	6
Master of Science	10	3	13
Bachelor of Environmental Studies (General Program - 3 Year)	17	7	24
Bachelor of Environmental Studies (Honours Program)	347	73	420
Bachelor of Knowledge Integration (Honours Program)	17	4	21
Total	482	179	661

FACULTY OF HEALTH	SPRING	FALL	2024 TOTAL
Doctor of Philosophy	16	13	29
Master of Arts	3	7	10
Master of Health Evaluation	14	2	16
Master of Health Informatics	30	5	35
Master of Kinesiology	-	10	10
Master of Public Health	-	40	40
Master of Science	22	17	39
Master of Social Work	3	100	103
Bachelor of Arts (Honours Program)	100	25	125
Bachelor of Public Health (Honours Program)	63	8	71
Bachelor of Science (General Program - Four Year)	3	4	7
Bachelor of Science (Honours Program)	324	34	358
Total	578	265	843

FACULTY OF MATHEMATICS	SPRING	FALL	2024 TOTAL
Doctor of Philosophy	32	36	68
Master of Actuarial Science	-	11	11
Master of Data Science and Artificial Intelligence	30	-	30
Master of Mathematics	97	99	196
Master of Mathematics for Teachers	29	32	61
Master of Quantitative Finance	14	2	16
Bachelor of Computer Science (Honours Program)	108	48	156
Bachelor of Computer Science (Honours Co-operative Program)	346	53	399
Bachelor of Computing and Financial Management (Honours Co-operative Program)	22	2	24
Bachelor of Mathematics (General Program – Three Year)	24	13	37
Bachelor of Mathematics (General Co-operative Program – Three Year)	5	2	7
Bachelor of Mathematics (Honours Program)	236	106	342
Bachelor of Mathematics (Honours Co-operative Program)	331	100	431
Total	1,274	504	1,778

FACULTY OF SCIENCE	SPRING	FALL	2024 TOTAL
Doctor of Philosophy	39	24	63
Master of Science	58	66	121
Bachelor of Science (General Science – Three Year)	59	26	85
Bachelor of Science (Honours Program)	748	159	907
Doctor of Optometry	95	1	96
Doctor of Pharmacy (Co-operative Program)	1	109	110
Total	1,002	385	1,387

2024 CONVOCATION CEREMONY PARTICIPATION

Convocation is an opportunity for our whole campus community to engage in the celebration.

The following sections provide an overview of how eligible graduates, faculty and staff took part in 19 unique convocation ceremonies over spring and fall 2024.

GRADUAND ATTENDANCE BY FACULTY

Using data provided by the Registrar’s Office, Community Relations and Events (CRE) manages convocation registration for all graduates. CRE tracks both registrations and actual attendance of graduates via a ticketing system that was first introduced in 2022.

This chart is the cumulative total of graduates for 2024. “Show rate” is the percentage of eligible graduates who attend convocation in person.

Graduand participation has been trending upwards across all faculties since the pandemic, with a noticeable 5% increase in show rates in 2024.

FACULTY	ELIGIBLE GRADUATES	REGISTERED GRADUATES	ATTENDED GRADUATES	GRADUATE SHOW RATE (%)
Arts	2,097	1,624	1,548	73%
Engineering	2,615	2,197	2,109	80%
Environment	667	487	481	72%
Health	849	668	664	78%
Math	1,778	1,283	1,212	68%
Science	1,394	984	947	67%
Total	9,400	7,243	6,633	71%

GUEST ATTENDANCE

The opportunity to celebrate with family, friends and other supporters is a central part of the convocation experience for our graduands. Managed by the Community Relations & Events team through a ticketing system, each graduate is eligible for at least two guest tickets, with further ticket availability depending on the size of the graduating class and other considerations.

In 2024, a total of 18,904 guests attended.

A livestream is also available for out-of-town supporters with over 56,000 views in 2024.

TOTAL STAGE PARTY PARTICIPATION

Having a full stage party demonstrates visible support for the graduands in each class.

The stage party is made up of:

- (a) participants in the faculty procession
- (b) participants in the Chancellor’s procession, and
- (c) graduate hooders (who enter as part of the Chancellor’s procession).

For the purposes of highlighting participation by each faculty, the summary outlined below *excludes* Deans and senior administrators who work for a central unit on campus, and any special guests, government, and award recipients.

Faculty members who participated in multiple ceremonies are recorded for each of the ceremonies.

FACULTY	SPRING	FALL	TOTAL
Arts	114	62	176
Engineering	90	55	145
Environment	31	21	52
Health	35	26	61
Mathematics	52	38	90
Science	66	33	99

CEREMONY PARTICIPATION BY FACULTY

There are two processions that combine to form the stage party. The *Chancellor’s procession* includes faculty members who participated in a ceremonial role (i.e., readers, hosts, macebearer), and faculty leadership (i.e., Associate Deans, Department Chairs). In contrast, the *Faculty procession* is comprised of faculty members who do not have a specific ceremonial role but are represented on stage in support of the faculty and its graduating class.

The following chart summarizes the size of each stage party, broken down by Chancellor’s procession and Faculty procession participation, for each individual ceremony.

For the purposes of highlighting participation by each faculty, the summary outlined below *excludes* Deans and senior administrators who work for a central unit on campus, and any special guests, government, and award recipients.

Faculty members who participated in multiple ceremonies are recorded for each of the ceremonies.

Due to the large number of ceremonies each spring, there are some ceremonies that have visibly smaller stage party presence.

FACULTY	TOTAL # OF CEREMONIES	CEREMONY DATE & TIME	CHANCELLOR'S PROCESSION	FACULTY PROCESSION	TOTAL STAGE PARTY
Arts	4	June 13 - morning	16	17	33
		June 13 - afternoon	21	21	42
		June 13 - evening	12	16	28
		October 26 - morning	22	26	48
Engineering	5	June 14 – evening	12	5	17
		June 15 – morning	9	2	11
		June 15 - afternoon	13	10	23
		June 15 - evening	13	8	21
		October 26 - afternoon	13	22	35
Environment	2	June 11 - morning	16	10	26
		October 25 - morning*	11	3	14
Health	2	June 11 - afternoon	10	18	28
		October 25 - morning*	13	6	19
Mathematics	4	June 12 - morning	10	2	12
		June 12 - afternoon	12	2	14
		June 12 - evening	12	1	13
		October 25 - afternoon	13	8	21
Science	3	June 14 - morning	16	11	27
		June 14 - afternoon	18	11	27
		October 25 - evening	13	10	23

* joint ceremony between Faculty of Environment and Faculty of Health for Fall 2024

GRADUATE HOODER PARTICIPATION

Graduate hooders are faculty members who are eligible to hood their graduating Master’s or Doctoral student(s). During the Spring 2024 ceremonies, there were a total of 64 graduate hooders. During the Fall 2024 ceremonies, there were a total of 75 graduate hooders.

Through collaboration with Graduate Studies & Postdoctoral Affairs, efforts have been made in recent years to encourage this participation, with positive overall uptake.

HONORARY DEGREES & SPECIAL AWARDS

In Spring 2024, the University honoured:

- 9 Honorary Doctorates
- 8 Distinguished Professor Emeriti
- 7 Honorary Members of the University

In Fall 2024, the University honoured:

- 3 Honorary Doctorates
- 4 Distinguished Professor Emeriti

Once approved via Senate, the Secretariat confirms the honorands with Community Relations and Events.

Community Relations and Events works directly with all honorands, ensuring that each is supported and prepared for their ceremony.

Community Relations and Events collaborates with the Office of Advancement and each Faculty to successfully support additional engagement activities for the Honorary Doctorates when they are on campus. This may include community or campus talks, dinners, or other special celebrations.

VOLUNTEER AMBASSADORS

Staff taking part in various roles in the convocation ceremonies and receptions are instrumental to the delivery of this important event and demonstrate a comprehensive commitment to student success throughout their UWaterloo journey.

Each ceremony requires at least 30 volunteer ambassadors to work alongside the convocation team to execute a ceremony. These volunteer roles include marshaling, way finders, accessibility assistants, side stage management and more. Many roles have direct interaction with students, which is valuable for graduands and staff alike.

Over the course of 19 ceremonies in 2024, there were almost 600 shifts required to be filled by University of Waterloo staff volunteer ambassadors. Ambassadors come from units across campus. Many volunteer ambassadors have contributed at more than one ceremony.

Having a full complement of volunteer ambassadors to augment the convocation team is essential not just to delivering the best possible experience for graduands and guests, but also to ensure that we avoid risk of not having enough capacity to deliver all functions of the operation.

Since the pandemic, there has been a notable decline in participation from the campus community to support convocation. This is especially prevalent in spring, given the number of weekend and evening ceremonies. Despite considerable efforts to attract and retain ambassadors, the convocation team has had to turn to paid student roles to help offset this trend.

In spring 2024, there was a combined 50 unique staff participating from the Faculties; there were 30 combined unique staff from the Faculties at fall convocation.

CAMPUS PARTNERSHIPS

In addition to the convocation team and volunteer ambassadors, there are myriad campus partners who have an active operational role to bring convocation to fruition. These partners are recognized below:

AccessAbility

Advancement & Alumni Relations

Athletics and Recreation

Campus Response Team

Campus Wellness

Catering and Events Services

Central Stores

Faculty of Arts

Faculty of Engineering

Faculty of Environment

Faculty of Health

Faculty of Mathematics

Faculty of Science

Information Systems & Technology

Plant Operations

Offices of the President & Provost

Safety Office

Secretariat

Special Constable Service

Student Success Office

Sustainable Transportation

WatCard

WStore & WPrint

WUSA

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:** **November 25, 2024****Agenda Item Identification:** **6.4 Awards, Distinctions, Grants, Waterloo International Engagements****Summary:**

Presenting the Vice-President, Research and International Report to Senate for November 2024. This report to Senate highlights successful research, international and entrepreneurial outputs and outcomes for the period September 2024 by the thematic areas as outlined in Waterloo's Strategic Plan 2020-25.

Documentation Provided:

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

**Vice-President, Research & International
Report to Senate
November 2024**

Introduction

This report to Senate highlights successful research and international outputs and outcomes for the period September 2024.

Commercialization and Entrepreneurship Highlights:

Pitchbook Rankings

The annual Pitchbook ranking of the top 100 Universities for producing startup founders has again ranked the University of Waterloo first among the U15 Universities, and twenty-first globally for producing the most undergraduate founders between 2013 and 2024 – (N=562 founders).

Additionally, the annual Pitchbook ranking of Universities globally producing investment-backed undergraduate *female entrepreneurs* ranked Waterloo third among the U15 Universities producing 51 female founders between 2013 and 2024 (McGill= 93 and Toronto=79), and second among the U15 for amount of capital raised by these founders = \$582M (Toronto = \$676M).

Velocity Start-Up Success Stories – Students and Recent Graduates

Alina Pavel (Co-founder and BAsC '21) and Ryan Gallagher (Co-founder and BAsC '21) – [Scribenote](#)

Scribenote an AI-powered medical scribe that saves veterinarians up to two hours a day by transcribing their notes, has raised \$8.2 million in seed funding in this reporting period. The round was led by Andreessen Horowitz with participation from Inovia Capital, undisclosed angel investors and existing investor the Velocity Fund.

Ruslan Nikolaev (Co-founder and BCS '20) and Griffin Keglevich (Co-founder and BCS'20) – [Float](#)

Float is an all-in-one spend management platform for businesses — offering corporate cards and tools for expense tracking and financial management. In this reporting period, they secured second place in the [Linkedin list](#) of top 15 Canadian emerging startups.

Funded Research Awards:

National Cybersecurity Consortium

The National Cybersecurity Consortium advances cybersecurity innovation and talent development in Canada by growing a pan-Canadian network that works with private and public sectors to lead world-class cybersecurity innovation and increase cybersecurity-related economic activity in Canada. The University of Waterloo was the lead on four funded projects and a collaborator on two more in the 2024 round of funding.

Project Lead: University of Waterloo

Project title: Craft: Cybersecure Robotics and Future Talent - \$1,000,000

Collaborators: Cobionics | Labforge | Canadian Nuclear Labs | BTQ
Palitronica | Quanser | Alectra | Milton Hydro | Real Life Robotics

Project overview: This project addresses the growing need for professionals skilled in robotics cybersecurity combining knowledge in hardware, cybersecurity, and social aspects to protect against cyber threats. With robotics technology advancing rapidly, there is a gap in cybersecurity measures, especially due to the interdisciplinary nature of the required training. The project provides distinct training programs in Canada, including offensive and defensive cybersecurity courses, a cyber tabletop exercise, and a robotics cyber range. These courses offer practical, hands-on experience with robotics systems, aiming to equip participants with the skills to assess vulnerabilities, develop defenses, and respond to cyber threats effectively.

Project Lead: University of Waterloo

Project title: Enabling Secure Outsourcing of Sensitive Data - \$295,000

Collaborators: Amazon AWS | Royal Bank of Canada | Airbus

Project overview: This project addresses the critical need for secure data storage in the cloud, which is especially pertinent given the widespread reliance on cloud services by businesses. This project overcomes the challenges of traditional encryption methods that may compromise data privacy. The goal is to design advanced data systems that address these concerns by enabling secure storage, efficient yet secure search capabilities, and protection against new forms of threats like access pattern attacks.

Project Lead: University of Waterloo

Project title: Adaptive Defense Strategies for Advanced Driver- Assistance Systems: A Game-Theoretic Approach - \$164,622

Collaborators: None

Project overview: As advanced driver-assistance (ADA) systems and autonomous-driving (AD) systems continue to transform the automotive ecosystem, connectivity emerges as a fundamental aspect. Connectivity offers numerous advantages but also exposes smart vehicles to cyberattacks that could pose threats, including the potential loss of human life. This project explores the applications of security games for ADA/AD systems in three ways: (i) the applicability of different solution techniques; (ii) the incorporation of real-time information to achieve sequentially adaptive policies; and (iii) the robustness of defense policies to counter-adaptive, AI-assisted attackers.

Project Lead: University of Waterloo

Project title: Secure Genomic Data Processing: Unleashing the Potential of Personalized Medicine Approach - \$129,900

Collaborators: Independent genomics researcher

Project overview: Technological advancements, including companies like 23andMe and Ancestry, have transformed accessing health care and ancestry-related information. Despite promising advances in personalized medicine using genetic data, these genetic services pose significant privacy risks due to the sensitive nature of genomic data, with breaches leading to irreversible privacy violations. This project ensures the privacy and confidentiality of genomic data while retaining its utility by leveraging trusted execution environments (TEEs).

Project lead: Institut national de la recherche scientifique

Project title: Securing the Metaverse with Multimodal Access Control and Authentication Methods - \$500,000

Collaborators: In Virtuo | Beam Me Up | Kaptics | MYND Therapeutics| University of Waterloo | ColAB Numerique | Digital Trust

Project overview: The metaverse will see real and virtual worlds come together, allowing individuals to socialize, play, work, transact, and visit healthcare professionals in the comfort of their homes without time, mobility, or space constraints. While the metaverse can revolutionize numerous domains, it faces severe challenges with user privacy, cybersecurity, and identity management. This project brings together experts with complementary expertise in AI, metaverse, identity management, and decentralized technologies, as well as several Canadian companies invested in the metaverse, to explore an early-stage idea of developing new access control and authentication methods based on data collected from sensors embedded in immersive reality headsets.

Project lead: University of Western Ontario

Project title: Adaptive AI Firewall Specializing in the Protection of AI Models, Critical Infrastructure, Systems and Agents - \$500,000

Collaborators: Syngen AI Lab | University of Waterloo

Project overview: The Adaptive AI Firewall (AAF) project fortifies the AI systems that are becoming crucial to our daily lives and national infrastructure against cyberattacks. These include autonomous self-driving vehicles, real-time control systems, and mission critical systems. Traditional security measures are proving inadequate because they cannot evolve to counter new, unknown attacks; and the complexity of AI systems such as large language models make them impossible to secure using traditional application security methods. AAF is a smart, learning firewall designed to adapt and respond to threats as they evolve. Imagine a guardian that learns from every attack, becoming smarter and stronger over time, ensuring our AI systems are always protected from malicious input.

NSERC Alliance Advantage

Alliance Advantage grants (formerly Alliance cost-sharing option 1) are for partner-driven projects which generate new knowledge and accelerate the application of research results to create benefits for Canada. In this period, the following projects were funded and officially announced:

Solomon Tesfamariam (Civil and Environmental Engineering)

Title: Interactive risk assessment framework of transmission gas network

Partner: Enbridge

Amount: NSERC award \$300,000 over 4 years (+ \$150,000 cash and \$46,080 in-kind from partner contributions recognized for cost sharing)

Nasser Mohieddin Abukhdeir (Chemical Engineering)

Title: Development and Application of a Generalized Adaptive Model for Large Conditioned Spaces

Partner: City of Waterloo

Amount: NSERC award \$200,000 over 4 years (+ \$100,000 cash and \$178,800 in-kind from partner contributions recognized for cost sharing)

NSERC Alliance/ Mitacs

NSERC Alliance-Mitacs Accelerate grants support projects of varying scale and complexity, from short-term smaller projects involving one researcher to long-term projects involving researchers across several universities, and from one-on-one collaborations with a single partner organization directly involved in the research to projects involving many partner organizations across multiple sectors. In this period the following projects were funded and were officially announced:

Kevin Musselman (Mechanical and Mechatronics Engineering)

Title: Development of atmospheric-pressure spatial atomic layer deposition barrier coating technology for sustainable packaging

Partner: Nfinite Nanotechnology Inc.

Amount: NSERC award \$700,000 over 3 years (+350,000 cash from Mitacs, +\$350,000 cash and \$330,966 in-kind from partner contributions recognized for cost sharing)

Chantel Markle (School of Environment, Resources and Sustainability)

Title: Identifying climate change resilient habitat using an integrative machine learning and coupled microclimate-biophysical modelling framework

Partner: Georgian Bay Biosphere

Amount: NSERC award \$163,489 over 3 years (+55,000 cash from Mitacs, +\$85,360 cash and \$273,240 in-kind from partner contributions recognized for cost sharing)

NSERC/ NSF Global Centres Initiative

Global Centres is a joint initiative between the Natural Sciences and Engineering Research Council of Canada (NSERC), the Social Sciences and Humanities Research Council of Canada (SSHRC), the US National Science Foundation (NSF), Australia's Commonwealth Scientific and Industrial Research Organisation (CSIRO), and UK Research and Innovation (UKRI) to encourage and support international collaborative research on climate change and clean energy. In this period, the following project was funded and officially announced:

Christian Euler (Chemical Engineering)

Title: GC: CIRCLE: Center for Innovative Recycling and Circular Economy

Partners: Tae Seok Moon, J. Craig - Venter Institute, Maryland, United States

Amount: NSERC award \$2,251,000 + \$202,500 from SSHRC over 5 years

National Institutes of Health (NIH)

In this period, the following project was successfully funded by the National Institutes of Health (NIH).

Evelyn Yim (Chemical Engineering)

Dr.Yim is a co-applicant on a National Institute of Health grant lead by Oregon Health & Science University.

Title: Engineering of biomaterials with controlled biomolecule delivery for cardiovascular applications

Amount: \$920,785 USD over 4 years.

Natural Resources Canada (NRCan) – Geological Survey of Canada (GSC)

Canada's governments depend on geoscience to inform policy, manage the country's landmass and develop its natural resources responsibly. The Geological Survey of Canada (GSC) is the national organization for geoscientific information and research. In this period, the following project was successful and officially announced:

Chris Fletcher (Geography and Environmental Management)

Title: Land Surface Modelling to Support Ongoing collaboration on the Disaggregation of Satellite Data on Regional Water Quantity Trends

Amount: \$39,999.99

Mitacs

Mitacs is "Canada's leading innovation organization" that supports research and training through effective partnerships. Through matched funding programs, Mitacs connects researchers, government, and public and private sectors, to promote innovation, complex problem solving, economic growth and productivity across a diverse range of sectors including advanced manufacturing, AI, cleantech, cybersecurity, health and life sciences, IT, quantum, and beyond. The following projects were successful in this period and have been officially announced:

Luis Ricardez-Sandoval (Tier II Canada Research Chair in Multiscale Modelling and Process Systems - Chemical Engineering)

Title: Optimal Improvement of Prescriptive Analytics in a Vaccine Manufacturing Plant using Machine Learning Tools

Amount: \$180,000

Amir Khajepour (Mechanical and Mechatronics Engineering)

Title: Towards Green Autonomous Distribution Yards (**Mitacs award only; Joint Award with NSERC Alliance Program**)

Amount: \$1,666,666

Awards and Distinctions:

Geoff Fong (Psychology)

[2025 Inductee, Canadian Medical Hall of Fame](#)

The Canadian Medical Hall of Fame celebrates Canadian heroes whose work advances health in Canada and the world and fosters future generations of health professionals.

Rajibul Islam (Physics and Astronomy)

[Physics, 2024 Fellow, American Physical Society](#)

The APS Fellowship Program was created to recognize members who may have made advances in physics through original research and publication or made significant innovative contributions to the application of physics to science and technology.

Mark Servos (Earth and Environmental Sciences)

[2024 Award for Outstanding Contribution to Canadian Ecotoxicology, Canadian Ecotoxicity Workshop](#)

The Canadian Ecotoxicity Workshop (CEW) is Canada's leading annual event in the field of ecological toxicology and related disciplines.

Waterloo International:

In cooperation with faculties and other offices on campus, Waterloo International provides leadership on, and coordination of, internationalization plans for the University. In this period, Waterloo International has completed the following activities towards this goal.

Enhance International Priorities and Partnership Connections

Executed a new institutional MOU between the Faculty of Health and the Higher Colleges of Technology in UAE to facilitate future programming and collaboration in research, student and faculty exchange.

Support International Talent Pipeline Development and Student Mobility

- Registered 179 international university-sanctioned trips and monitored over 1300 active travelers.
- Stewarded 1 high-risk travel request, including evaluation and assessment of risk-mitigation plans.
- Monitored over 30 high-risk global incidents.
- Coordinated with 2 travelers impacted by high-risk global incidents.

For Information

Open Session

To: Senate

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

Date of Meeting: **November 25, 2024**

Agenda Item: **6.5 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 page¹](#).

¹ <https://uwaterloo.ca/secretariat/sites/default/files/uploads/documents/all-faculties-nov-2024-2.pdf>