

# UTQAP Cyclical Review: Final Assessment Report and Implementation Plan

## 1 Review Summary

<b>Program(s) Reviewed:</b>	<p>Computer Science (HBSc): Specialist, Major, Minor</p> <ul style="list-style-type: none"> <li>Specialist Foci: Artificial Intelligence, Computational Linguistics and Natural Language Processing, Computer Systems, Computer Vision, Game Design, Human-Computer Interaction, Scientific Computing, Theory of Computation, Web and Internet Technologies</li> </ul> <p>Data Science (HBSc): Specialist</p> <p>Applied Computing, MScAC</p> <ul style="list-style-type: none"> <li>MScAC Concentrations: Applied Mathematics, Data Science, Quantum Computing</li> </ul> <p>Computer Science: MSc, PhD</p>
<b>Unit Reviewed:</b>	Department of Computer Science
<b>Commissioning Officer:</b>	Dean, Faculty of Arts & Science
<b>Reviewers (Name, Affiliation):</b>	<ul style="list-style-type: none"> <li>Professor Nancy M. Amato, Head of the Department of Computer Science, Abel Bliss Professor of Engineering, University of Illinois at Urbana-Champaign</li> <li>Professor Kavita Bala, Dean, Ann S. Bowers College of Computing and Information Science, Cornell University</li> <li>Dr. Matthew Turk President, Toyota Technological Institute at Chicago (TTIC) Professor Emeritus, Department of Computer Science University of California, Santa Barbara</li> </ul>
<b>Date of Review Visit:</b>	June 2-3, 2022 (conducted virtually)
<b>Review Report Received by VPAP:</b>	February 2, 2023
<b>Administrative Response(s) Received by VPAP:</b>	September 21, 2023
<b>Date Reported to AP&amp;P:</b>	October 24, 2023

## Previous UTQAP Review

**Date:** February 3–5, 2014

### Summary of Findings and Recommendations

#### Significant Program Strengths

- Flexible, model undergraduate curriculum
- Well-conceived, growing undergraduate program is a “gem” of the University
- Highly competitive graduate programs attract excellent students
- Excellent reputation and visibility of doctoral program
- Faculty leadership in Canadian research networks
- Partnerships with external institutions and outreach activities

#### Opportunities for Program Enhancement

- Increasing undergraduate course offerings and opportunities to work with tenure-track faculty
- Strengthening graduate course offerings
- Maintaining quality of graduate students and managing time-to-completion
- Expanding coverage of key disciplinary areas in the curriculum and research and increasing international publication and citation rankings
- Building communication and relationships among faculty and addressing physical separation of the Department across multiple locations
- Modernizing laboratories to meet student needs

## Current Review: Documentation and Consultation

---

### Documentation Provided to Reviewers

Terms of reference; Self-study; Appendices; Previous review report including the administrative response(s); Access to all course descriptions; Access to the curricula vitae of faculty.

### Consultation Process

Dean, Vice-Dean, Academic Planning, Acting Associate Dean, Unit-Level Reviews, Faculty of arts & Science; Chair; Associate Chair, Undergraduate; Associate Chair, Graduate; academic leadership team; undergraduate and graduate programs senior administrators; administrative management; administrative staff; faculty, students, chairs of cognate units: Department of Chemistry, Department of Statistical Sciences, Department of Mathematics, Department of Physics, Faculty of Arts & Science; Department of Laboratory Medicine & Pathobiology, Department of Medicine, Temerty Faculty of Medicine; Department of Electrical & Computer Engineering, Faculty of Applied Science & Electrical Engineering.

# Current Review: Findings and Recommendations

---

## 1. Undergraduate Program(s)

*Unless otherwise noted, all bulleted comments apply to all programs reviewed.*

The reviewers observed the following **strengths**:

- Overall quality
  - ▶ Strong and comprehensive programs, with well-taught courses
  - ▶ Systems for admissions, program delivery, and assessment function well in an environment of extremely high demand and limited resources
  - ▶ Huge interest in programs, in keeping with trends at peer institutions
  - ▶ Huge demand in other disciplines for training in computing subjects “so a strong CS department serves the university’s mission in many ways”
- Objectives
  - ▶ Programs are modern and field-appropriate; learning outcomes are consistent with academic and professional expectations
- Curriculum and program delivery
  - ▶ Teaching-stream faculty are especially engaged in delivering high-quality programs that reflect current topics, tools, and pedagogy
  - ▶ Students feel that there are good opportunities for involvement in research
- Assessment of learning
  - ▶ Learning is assessed in meaningful ways
- Student engagement, experience and program support services
  - ▶ Students are happy with their educational environment
  - ▶ Students receive good support and program guidance from administrative and technical staff as well as from faculty
- Quality indicators – undergraduate students
  - ▶ Excellent student quality, with acceptance rates and yields showing high selectivity and high demand
  - ▶ Completion rates and times are similar to those at other top CS departments
- Quality indicators – alumni
  - ▶ Huge demand for students who have completed degrees offered by the department

The reviewers identified the following **areas of concern**:

- Admissions requirements
  - ▶ “High demand for the program and the lack of departmental control over admissions to the CS stream by A&S can lead to limited opportunities to enter the program later, resulting in a stressful environment which negatively impacts the student experience and limits opportunities to improve diversity”

- Student engagement, experience and program support services
  - ▶ Students are frustrated about paying higher fees, and do not understand how they are used to improve their experiences in the department
  - ▶ Department does not have the staffing resources to meet expectations of higher levels of service
  - ▶ Concerns regarding program challenges related to huge demand for admission or transfer into the department’s programs and courses

## 2. Graduate Program(s)

*Unless otherwise noted, all bulleted comments apply to all programs reviewed.*

The reviewers observed the following **strengths**:

- Overall quality
  - ▶ Programs are well structured, taught, and administered, given resource limitations
  - ▶ MScAC is a long-standing successful program; “it is very well staffed and addresses an important need of providing internships and a strong program to position students well post graduation, including a potential pathway to the PhD”
- Objectives
  - ▶ Programs are modern and field-appropriate, and the learning outcomes are consistent with academic and professional expectations
- Curriculum and program delivery
  - ▶ Students engage in research projects, industry internships, and required coursework in ways consistent with other top research departments
- Student engagement, experience and program support services
  - ▶ Students are generally happy and well-served
  - ▶ Students are satisfied with their programs and have a strong sense of community within their research areas
  - ▶ Students receive good support and program guidance from administrative and technical staff as well as from faculty
- Quality indicators – graduate students
  - ▶ Excellent student quality, with acceptance rates and yields showing high selectivity and high demand
  - ▶ Completion rates and times are similar to those at other top CS departments
  - ▶ Department (and therefore the PhD program) is highly ranked internationally
- Quality indicators – alumni
  - ▶ Huge demand for students who have completed degrees offered by the department

The reviewers identified the following **areas of concern**:

- Student engagement, experience and program support services
  - ▶ Students commented that the department feels “siloed”

- ▶ Graduate student culture noted as a point of stress and concern, reported as “nonexistent” or “varying greatly depending on area or group”
- ▶ Monitoring and tracking of program requirements for students noted as uneven, with some students getting limited timely feedback
- Student funding
  - ▶ Graduate student stipends are a very significant source of stress; “flagged by faculty and students as very low, with a desire all around to increase them to be competitive with other top CS departments”
  - ▶ Department feels that a lack of budgetary transparency prevents them from providing more competitive funding packages for graduate students
  - ▶ Variation in student funding packages causes inequities; “need for some students to pick up one (or more) TA positions to augment their stipend exacerbates unequal treatment”

The reviewers made the following **recommendations**:

- Student funding
  - ▶ “Funding for graduate students does not match the very high cost of living in Toronto and should be increased”

### 3. Faculty/Research

The reviewers observed the following **strengths**:

- Overall quality
  - ▶ Faculty are exemplary both in the research and teaching track, and the department benefits from their dedication
  - ▶ Department has an excellent international reputation for its strong faculty and research agenda
- Faculty
  - ▶ 2014 review warned that a decline in tenure stream faculty and lack of faculty hiring posed risks to department’s international ranking; reviewers congratulate the department for avoiding these risks and growing its reputation and ranking through excellent faculty hires in both tenure and teaching stream
  - ▶ Growth of the tenure-stream faculty since the previous review has been important and very positive
  - ▶ Highly successful recent recruiting of strong junior faculty
  - ▶ Faculty complement is well-balanced between junior and senior faculty, with significant strength in most areas of computing
  - ▶ Junior faculty seem supported and engaged

The reviewers identified the following **areas of concern**:

- Faculty
  - ▶ Recent hiring in the tenure stream has been successful, but department does not have a clear sense of how much faculty complement growth will be authorized going future
  - ▶ Reviewers note the lack of a consistent policy and approach regarding the significant number of faculty who are on leave or on reduced appointments due to engagements in industry; concerns expressed regarding the increased responsibilities for remaining faculty
  - ▶ The teaching stream faculty require more staffing both in teaching lines and in support staff and coordinators; “Teaching-stream faculty have good morale but are rightly concerned about being at their breaking point in terms of being ‘one person away from disaster.’”

The reviewers made the following **recommendations**:

- Faculty
  - ▶ Department would benefit from more autonomy and freedom to recruit as needed to address the growth of interest in computing
  - ▶ More teaching stream faculty are required to meet demand for increased enrolment
  - ▶ Acknowledging that arrangements for faculty leaves and reduced appointments due to industry engagement may be necessary for faculty retention, reviewers note that the department needs a sustainable, strategic approach to the issue

## 4. Administration

*Note: Issues that are addressed through specific University processes and therefore considered out of scope for UTQAP reviews (e.g., individual Human Resources issues, specific health and safety concerns) are routed to proper University offices to be addressed, and are therefore not included in the Review Summary component of the Final Assessment Report and Implementation Plan.*

The reviewers observed the following **strengths**:

- Relationships
  - ▶ Overall department morale is good, relationships between faculty and staff appear to be good
  - ▶ Faculty have a strong sense of community and seem to be engaged in the department despite being distributed over multiple campuses and buildings
  - ▶ Department has significant involvement in many other parts of the university including joint appointments and engagements in interdisciplinary programs, cross-disciplinary research collaborations, institutes, and centers, etc.
  - ▶ Cognate departments recognize and appreciate the importance of computing and having a strong CS department at the university

- ▶ Department recognizes the benefits of faculty affiliations with prestigious Vector Institute
- ▶ Department has a very visible and high profile outside the university in industry and academia
- Organizational and financial structure
  - ▶ Good leadership structure within the department with many senior faculty willing to provide needed leadership in various roles
  - ▶ Despite challenges brought on by massive growth in the past decade, including space-related challenges and resources that have not scaled accordingly, “the department has done a nice job of administering and improving its programs and increasing its reputation”
  - ▶ Well-organized administrative and technical staff are of great assistance to both students and faculty
  - ▶ New Faculty Council is a good step toward maintaining a cohesive culture of shared decision making
- Long-range planning and overall assessment
  - ▶ “This is a very strong department with exemplary faculty, in both research and teaching, and it is ranked worldwide as a leader in many important research areas”
  - ▶ Arts & Science leadership recognize the importance of supporting the CS department and expressed a commitment to addressing space-related challenges
  - ▶ Department appears to have weathered the COVID-19 pandemic well
- International comparators
  - ▶ “The Department of Computer Science at Toronto is the strongest in Canada in terms of size, coverage, research strengths, recognition, and international reputation”

The reviewers identified the following **areas of concern**:

- Relationships
  - ▶ Faculty report being deeply concerned that a department-wide culture is hard to maintain given the lack of unified departmental space, the tri-campus structure, and rapid growth of the department in recent years
  - ▶ Reviewers note concerns that relationships with prestigious external partners do not necessarily benefit the department as a whole
  - ▶ Concerns expressed by a small number of staff regarding differing treatment compared to faculty, with regard to issues such as compensation, career growth, office space, and schedule flexibility
- Organizational and financial structure
  - ▶ Size and complexity of the department following recent growth has led to difficulty ensuring that all faculty are informed and have appropriate input on departmental matters
  - ▶ Challenges in maintaining appropriate administrative staff complement due to staff taking secondments or pursuing other options for career advancement; challenges in growing the staff complement due to slow-moving and opaque resource allocation processes at the Faculty level

- ▶ Lack of adequate space is a long-standing issue for the department that has become even more critical with the growth of the department and its programs; lack of progress on this issue is causing significant frustration and limiting faculty and staff morale
- ▶ Widespread recognition that shared departmental space is needed to “bring together all the disparate research groups into a shared space that will allow deeper collaborations and address the significant fragmentation that the department is experiencing culturally”
- ▶ Robotics faculty and graduate students do not have office space at the St. George campus, limiting opportunities to integrate into the department through connections with colleagues in other areas
- ▶ Lack of a transparent budget model or resource allocation policy at the Faculty level leads to strategic planning challenges for the department, particularly regarding faculty hiring
- ▶ Concerns raised that the tri-campus structure causes significant complexities, resulting in a lack of a clear strategic vision for the department and challenges with strategic coordination in faculty hiring
- ▶ Tri-campus arrangements, in which some faculty divide their time between teaching at UTM or UTSC and research at the St. George campus, leads to “a less than ideal environment for their students in both settings”
- ▶ Departmental self-study raises the need for a structure like a “School of Computing” to provide additional autonomy and budget control in order to thrive in the current period of growth
- Long-range planning and overall assessment
  - ▶ EDI was not a strong theme in the departmental self-study or in review site visit meetings with faculty, students, and staff; reviewers “worry that it is not a significant priority shared uniformly across the department”
  - ▶ Unclear if a departmental strategy exists for promoting or increasing diversity
  - ▶ Apparent lack of a role committed to EDI in senior leadership; lack of a clear mandate for other roles in the department with EDI-related responsibilities
  - ▶ Faculty and staff expressed concern and uncertainty about future growth in the department, including whether further growth will be allowed and whether additional resources will be available to support growth

The reviewers made the following **recommendations**:

- Relationships
  - ▶ Consider a strategic visioning exercise around engagement with industry and other external partners, with consideration of how these partnerships may be of benefit to the department and the institution
  - ▶ Develop a strategic partnership with the Data Sciences Institute
- Organizational and financial structure
  - ▶ Continue to develop better processes and structures for information flow, and for shared and collaborative decision making



- ▶ Departmental leadership/Faculty Council should actively solicit input and clearly communicate decisions and directions to all faculty
- ▶ Additional growth in faculty and staff complements is needed in order to maintain the department's high status and support growing demand
- ▶ Faculty should ensure that the department is aware of Faculty-level commitments regarding faculty and staff growth and how these relate to enrollment growth
- ▶ Faculty of Arts & Science should clarify budget model and resource allocation policy to support strategic planning at the departmental level
- ▶ Additional space is needed to support current needs and future growth of the faculty, staff, and student body, to prevent siloing of research areas, and to promote a shared departmental culture
- ▶ MScAC "seems somewhat underrealized in its potential" as a revenue-generating program; department should engage in more strategic planning about how to use resources generated by the program to support the department
- Long-range planning and overall assessment
  - ▶ More concerted effort, thought, and action is required in EDI
  - ▶ Continue working to mitigate stress experienced by students seeking entry into CS programs
  - ▶ Consider the future of graduate-level programs in computer science, including structures for programs that may be more scalable and cost-effective for the department while still providing important resources
  - ▶ Consider whether a structure such as a "School of Computing" would support the development of a strong strategic vision around the complexities of the tri-campus arrangement, strategic recruiting, and plans for engagement or collaboration with other related divisions and units within the university

## 2 Administrative Response & Implementation Plan



UNIVERSITY OF TORONTO  
FACULTY OF ARTS & SCIENCE

September 21, 2023

Professor Susan McCahan  
Vice-Provost, Academic Programs  
University of Toronto

### **RE: UTQAP cyclical review of the Department of Computer Science and its programs**

Dear Prof. McCahan,

I write in response to your letter of June 12, 2023, regarding the October 17-18, 2022, UTQAP cyclical review, held remotely, of the Department of Computer Science and its undergraduate and graduate programs: BSc: Data Science, Specialist; BSc: Computer Science, Specialist, Major, Minor; MScAC: Master of Science in Applied Computing; MSc, PhD: Computer Science, and requesting our Administrative Responses.

On behalf of the Faculty of Arts & Science, we would first like to thank the reviewers, Nancy M. Amato, University of Illinois and Urbana-Champaign, Kavita Bala, Cornell University, and Matthew Turk, Toyota Technological Institute at Chicago (Emeritus, UC Santa Barbara), for their very comprehensive review of the Department of Computer Science. We would also like to thank the Chair, Prof. Eyal de Lara, and faculty, administrative staff, and all those who contributed to the preparation of the self-study. We also want to thank the many staff, students, and faculty members who met with the external reviewers and provided thoughtful feedback. The UTQAP cyclical review process is an invaluable exercise that affords us the opportunity to take stock of our academic units and programs, to recognize achievement and identify areas for improvement.

The review report was finalized on February 2, 2023, after which the Chair shared it widely with faculty, staff, and students in the Department. We are extremely pleased with the reviewers' positive assessment of the overall strength of the Department of Computer Science, its continued evolution in the undergraduate and graduate programs, and its outstanding, productive faculty. The reviewers observed that the programs were "strong, well designed and well run," faculty have "a strong sense of community," and that both undergraduate and graduate students are "happy" and "satisfied" with their programs. The review report also raised several issues and challenges and identified areas for enhancement, including the need for departmental growth, increasing graduate stipends, and space concerns.

Each of these recommendations has been addressed in the attached Review Recommendations Table that outlines the Program's response, the Dean's response, and an Implementation Plan identifying action items and timelines for each recommendation. My Administrative Response and Implementation Plan was developed in consultation with the Chair and senior leadership within my office. The Implementation Plan provided identifies timeframes of immediate- (six months), medium- (one to two years), and longer- (three to five years) term actions and who (Faculty, Dean, unit) will take the lead in each area. I also identify any necessary changes in organization, policy, or governance where appropriate, as well as any resources, financial or otherwise, that will be provided, and who will provide them.

The next UTQAP cyclical review of the Department of Computer Science will take place no later than the 2029-30 review cycle. My office monitors progress on Implementation Plans through periodic meetings with the Chair and through the department's five-year unit-level academic planning process, which will begin at the conclusion of the cyclical review. I also acknowledge that your office will request a brief Interim Monitoring Report midway between the 2021-22 UTQAP review cycle and the year of the next site visit in 2029-30 to report on progress made on the Implementation Plan as outlined in the accompanying Review Recommendations Table.

Thank you very much for the opportunity to respond to the review report. The reviewers' comments and recommendations will help inform the future priorities of the Department of Computer Science and its undergraduate and graduate programs.

Sincerely,



Melanie Woodin  
Dean, Faculty of Arts & Science  
Professor, Department of Cell & Systems Biology

CC.

Eyal de Lara, Chair, Department of Computer Science, Faculty of Arts & Science

Brenda Chow, Director of Administration, Department of Computer Science, Faculty of Arts & Science

Gillian Hamilton, Associate Dean, Unit-Level Reviews, Faculty of Arts & Science

Suzanne Wood, Special Advisor to the Dean on Unit-Level Reviews, Faculty of Arts & Science

Daniella Mallinick, Director, Academic Programs, Planning & Quality Assurance, Office of the Vice-Provost, Academic Programs

Andrea Benoit, Academic Review Officer, Academic Planning, Office of the Dean, Faculty of Arts and Science

## 2021-22 UTQAP Review of the FAS Department of Computer Science - Review Recommendations

Please do the following for each recommendation in the table:

- If you **intend** to act on a recommendation, please provide an **Implementation Plan** identifying actions to be taken, the time frame (short, medium, long term) for each, and who will take the lead in each area. If appropriate, please identify any necessary changes in organization, policy or governance; and any resources, financial and otherwise, that will be provided, and who will provide them.
- If you **do not** intend to act on a recommendation, please briefly explain why the actions recommended have not been prioritized.
- In accordance with the UTQAP and Ontario's Quality Assurance Framework, "it is important to note that, while the external reviewers' report may include **commentary** on issues such as faculty complement and/or space requirements when related to the quality of the program under review, **recommendations** on these or any other elements that are within the purview of the university's internal budgetary decision-making processes must be tied directly to issues of program quality or sustainability" (emphasis added)
- You may wish to refer to the [sample table](#) provided by the Office of the Vice-Provost, Academic Programs

Request Prompt <i>verbatim from the request</i>	Rec. #	Recommendations from Review Report <i>verbatim from the review report</i>	Unit Response	Dean's Response
The reviewers observed a number of factors that may negatively impact undergraduate student wellbeing and satisfaction, including the structure of program admissions, and the level of available student services.	1	"The high demand for the program and the lack of departmental control over admissions to the CS stream by A&S can lead to limited opportunities to enter the program later, resulting in a stressful environment which negatively impacts the student experience and limits opportunities to improve diversity."	Recognizing the significant stress felt by many prospective Computers Science (CS) students, the Department has worked closely with the Faculty of Arts and Science (A&S) to change program admission policies. In 2022-2023, the Department limited enrolment in the CS Specialist program to students in the CS admission stream and implemented a supplementary application for those students outside the CS stream wishing to join the Specialist program later. This ensures that students are not making decisions to attend UofT based solely on a desire to study CS. We also worked with the Office of the Faculty Registrar to address some of our shared concerns about gender representation and are thrilled that our CS admission stream cohorts have included a higher proportion of women and non-male students. As A&S gathers more rich demographic information from applicants, we are excited about the possibility of further collaborations to	Short-term: The Dean's Office, and the Faculty Registrar in particular, have worked closely with the Department to resolve issues around admissions to Computer Science programs. As the unit response notes, there is now a new admissions process for CS, aimed at avoiding situations in which students come to U of T to study CS, only to find that they cannot gain admission to the program.
	2	"The enrolment strategy seems to be responding to the demand, but the student stress in trying to join the programs offered by the CS department should be mitigated."		

			<p>improve the diversity of our incoming cohorts.</p> <p>We will continue to monitor how effective the supplementary application is on reducing student stress, and the Associate Chair of Graduate Studies will assess and implement any needed changes in the medium term.</p>	
	3	<p>“The department recognizes that the students expect a higher quality of service (particularly since they pay higher fees) but does not have the staffing resources to meet this expectation. Further, more teaching track faculty are required to meet the demand.”</p>	<p>With A&amp;S’s support, the Department has grown its staff and faculty complement. However, staff turnover in some areas has been high, leading to some temporary shortfalls in service. We are actively engaged in investigating ways to retain staff. Some faculty members have also reduced their FTE, leading to reduced teaching capacity. See response #5 for more details.</p> <p>In the Undergraduate (UG) area, the addition of a Mentorship &amp; Career Coordinator and a Student Life &amp; Program Assistant has resulted in enhanced career advising and support for co-curricular learning opportunities including mentorship, conference attendance, and travel grants.</p> <p>The Department has also allocated additional faculty time to support UG initiatives through an Undergraduate Liaison role currently held by a teaching-stream faculty member. These roles allow us to develop resources and programming to enhance belonging, to celebrate diverse student accomplishments, and to reduce barriers to access to academic and co-curricular opportunities, including engagement in research, work-integrated learning, mentorship, and career exploration.</p>	<p>Short- to medium-term: As noted in the unit response, the Office of the Dean has been working with Computer Science to increase staff complement. Administrative HR Services will continue to work with the Department to address staffing levels.</p> <p>The Dean’s Office recognizes the importance of ensuring that the Department has appropriate faculty complement for its programs. Over the past 5 years, the Department’s complement has grown considerably, both in the teaching and tenure streams. Currently, there are 6 open searches in the Department.</p> <p>Long-term: Longer-term complement planning is included as part of the A&amp;S Unit-level planning (ULP) exercise. Following a UTQAP review, each unit is asked to create a 5-year plan that includes goals for research, curriculum, faculty support, administrative staff support, and complement planning. As part of this process, Computer Science will be asked to outline their complement needs over the next five years. This plan will be reviewed by the Dean and Vice-Deans. The ULP for Computer Science will inform future requests to the Faculty Appointments Committee.</p>

			<p>The Department continues to face ongoing issues with instructional capacity and workload. We appreciate the support of A&amp;S as we pilot two term staff positions this year (a second Lab Instructor and a part-time Learning Strategist), which aim to better support instructors and their students. If this pilot is successful, we may seek to continue these roles on an ongoing basis. The Department also plans to request additional teaching stream faculty positions and the staff needed to support their teaching.</p> <p>The Director of Administration and the Department Chair will monitor the effectiveness of staff and faculty support over the medium term, with the long-term goal of increasing student support levels through more efficient delivery of services and/or by increasing staff and/or faculty complement. The Department will work closely with A&amp;S on complement plans.</p>	
<p>The reviewers observed differing opinions from Computer Science community members about the value of MScAC and its benefits to the department; and broadly noted an opportunity for the department to strategically review its master’s-level programming as a whole.</p>	<p>4</p>	<p>“Given the large demand for computing education, this may be a good time for the department to think about what it wants from its Masters-level programs including considering restructuring it to be like programs, such as ECE’s MEng program, or perhaps adding another track of this program which does not include the labor-intensive internship program.”</p>	<p>We acknowledge that the MScAC program is labor-intensive. However, we believe that the result is a high-quality program that confers long-term benefits for the Department, the University, and our students. These benefits far exceed those of a course-based Masters. MScAC is unique, attracting a growing cohort of exceptional students seeking training in industrial R&amp;D. Program alumni are directly helping to address Canada’s shortfall in industrial R&amp;D and addressing a high-priority Departmental strategic objective of greater industrial engagement.</p> <p>Looking beyond UofT, the MScAC program is garnering the attention of both the provincial</p>	<p>The Dean’s Office agrees with the Department that the MScAC program, although labour intensive, is very successful and serves an important function for students. The internship is a particularly valuable aspect of the program that helps to attract top students.</p> <p>Short-term: The primary focus of the Dean’s Office is to support the outstanding programs already offered by the Department. Should the Department be interested in making significant changes to their programs, the Vice-Dean, Graduate Education would be available for consultation.</p>

			<p>and federal governments. Ministers of education, economic development, and innovation are acutely aware that MScAC graduates are integral to many companies boosting their research and innovation footprint in the country. This positions the Department as an integral player in Canada's innovation ecosystem.</p> <p>Adding a course-based Master's program is not a priority, as the Department is concentrating its resources on the MScAC and research-stream MSc and PhD programs.</p>	
<p>The reviewers observed that a significant number of Computer Science faculty are on leave and/or have partial appointments in industry, and recommended that the department develop a strategy around how to approach such arrangements and relationships sustainably, for the unit's long-term health. Noting a significant increase in demand for Computer Science offerings in recent years, they also broadly recommended that the department strategically expand its faculty complement when opportunities permit.</p>	<p>5</p>	<p>"Faculty on leave. A significant number of faculty are on leave or with partial appointments in industry. These arrangements are common in many top CS departments and might be necessary to retain these faculty. However, a lack of a consistent policy and approach has meant the net loss to the department has been high, with further fragmentation. A strategic plan on how to approach these kinds of relationships sustainably for the department's long-term health is needed."</p>	<p>We fully understand both the importance and the complexity of this issue. While having strong connections to industry is important for a top CS department, having faculty on leave lowers the quality of instruction and supervision we can offer our students, and also shifts the required administrative service on a smaller fraction of the faculty. To create a balanced policy that will be mutually beneficial to both the Department and our faculty, we are striking a sub-committee within the CS Planning and Budget committee. This subcommittee is charged with studying the approach taken to this problem by other institutions and creating a policy that would be optimal for our department. We are also asking for decanal and provostial representation on the committee, as support from the highest levels of university administration is critical for such a policy.</p> <p>The Department Chair and Vice-Chair expect to work with divisional and institutional representatives over the long term to develop a policy that best supports the</p>	<p>Short- to medium-term: The Dean's Office recognizes the complexities that arise through faculty connections with industry partners. The Dean supports the Department's efforts to resolve this through a sub-committee and will be happy to provide representation from the Dean's Office.</p>

			Department and faculty members with industry relations	
	6	“Resources to grow. To maintain the department’s high status and support the growing demand and importance of computing in society and to all academic disciplines, the department needs to grow in the research track faculty, the teaching faculty, and staffing.”	With the support of A&S, the Department has recently increased recruiting for staff and faculty (see response #3) and continue to monitor the need for additional growth.	The Faculty has been supporting the Department through increasing staff and faculty complement over the past several years.
	7	“The department would benefit from more autonomy and freedom to recruit as needed to address the growth of interest in computing.”	<p>Currently, the Department works with the A&amp;S to request new faculty lines and staff positions. We look forward to working with A&amp;S to achieve more autonomy in the future.</p> <p>Growth is further constrained by availability of space and the Department is actively working with the A&amp;S to find new space, both to consolidate geographically separated groups, and to locate new space for future expansion. We are working with A&amp;S on an interim space solution.</p> <p>As in response #3, the Director of Administration and Department Chair will work with A&amp;S to develop a long-term staff and faculty complement plan.</p>	Medium- to long-term: Under the Faculty’s new budget model, which is under development, the Department will have more autonomy in allocating its resources.
	8	“Additionally, the Faculty should ensure that the department understands the commitments that the Faculty and the university have made in terms of faculty and staff growth, and what relationship this has to enrollment growth. The review team observed that the department was unaware of resources, such as faculty positions, allocated by the Faculty of Arts & Science. The department should also be strategic in making decisions about revenue generating programs, such as the MScAC, including how they use the resources they generate. For example, can these resources be used to augment	The Department appreciates the support A&S has provided in approving faculty lines as well as support for start-up funds. We are open to working with A&S to better understand resource allocation. As mentioned above, the Department will transition to a new budget model, which will provide a more fulsome picture of how student revenues and other factors contribute to the overall resources allocated at the unit level. This will allow the Department to think more strategically about	Medium- to long-term: The Dean’s Office will work with the Department to ensure better communication around the allocation of resources. The new budget model should provide considerably greater transparency, given that the Department will have more autonomy over resource allocation.



		graduate stipends? To hire more faculty or staff? Clarity about these issues would allow the department to be more strategic when selecting which of the many opportunities available to them should be pursued.”	leveraging resources to enhance student experience.  The Director of Administration, the Financial Officer and the Department Chair will work with A&S over the medium term to implement a new budget model that will allow more strategic deployment of resources	
<b>Note: in considering approaches to addressing the following three prompts, you may wish to refer to the tri-campus graduate unit MOA process:</b>	-			
a. The reviewers noted a number of challenges impacting departmental cohesion and collaboration, and recommended that the department continue to develop and enhance processes and structures for information flow, and for shared and collaborative decision making.	9	“The new Faculty Council is a good first step to maintain a cohesive culture of shared decision making, but the department recognizes the need and should continue to develop better processes and structures for information flow, and for shared and collaborative decision making.”	The Department has had a long history of cohesive and collaborative governance over its 50 years. However, the rapid growth of the department over the last 7-10 years has cause it to “stretch” to the point where we are larger than most other departments at the university. While there have been growing pains, we are hopeful that the phase of rapid expansion is over, and we can spend the next several years building a governance structure that is appropriate for an entity with nearly 100 faculty members.  Indeed, the Department of Computer Science Faculty Council, which is formed by 7 representative of various CS areas, is one of the primary methods by which we are improving information flow, and engaging individuals from all areas of the department in decision making. Almost every topic of importance comes up at the Faculty Council, and then at a Faculty Meeting.  Additionally, the Department has a regular academic leadership meeting. While the leadership portfolios do not correspond to specific areas of CS, from a practical	Short- to medium-term: The Dean’s Office supports the Department’s efforts to enhance cohesion and collaboration, including regular meetings and the Computer Science Faculty Council. We encourage the Department to consult with the Vice-Dean, Faculty and Academic Life, regarding their efforts to create a more collaborative culture.

			<p>perspective we always aim to have representation from a diversity of research areas and backgrounds, to make sure that the decisions taken by the Department are representative.</p> <p>The Department Chair and Vice-Chair will monitor the effectiveness of the Faculty Council and Academic Leadership group over the medium term. Consultations with faculty members and with the Vice-Dean, Faculty and Academic Life may lead to changes to collaborative structures in the long-term.</p>	
<p>b. The reviewers also noted some challenges related to communication and collaboration across the tri-campus graduate department, and urged enhanced strategic coordination, and the development of a clear and unified tri-campus vision.</p>	<p>10</p>	<p>“Tri-campus arrangement. The tri-campus structure causes significant complexities. While many faculty felt they benefited from having the larger faculty size through this arrangement, concerns were raised about lack of coordination in hiring and in creating the separate robotics group on one of the campuses. This new arrangement deviates from the past arrangement and further fragments the research faculty and the graduate students. It was also mentioned that these robotics faculty and graduate students would benefit from simple support like office space (not lab space) in St. George to integrate better into the department. The overall lack of strong strategic coordination - and a clear unified vision - across the tri-campus arrangement was regarded as problematic.”</p>	<p>Although each campus separately manages its own recruitment, faculty members from all three campuses participate in the hiring process for all faculty members across all three campuses. This ensures that feedback from the other two campuses is taken into account and further ensures a consistent recruitment strategy.</p> <p>Recognizing that the tri-campus graduate experience requires better coordination, a Memorandum of Agreement is being drafted that clearly outlines the roles and responsibilities of the Department and the core processes and procedures that govern the graduate program across all three campuses. This will lead to standardized practices on all campuses.</p> <p>If space allows, (see responses #20 and 21), touch-down collaboration areas for students and faculty from other campuses will be provided.</p> <p>The Tri-Campus MOA will be implemented in the short-term. The Department Chair, in</p>	<p>Short- to medium-term: The Dean’s Office notes that the new tri-campus MOA will facilitate the standardization of practices and clarify and institutionalize the need for consistent consultation and collaboration across campuses.</p>
	<p>11</p>	<p>“If the goal is to develop graduate programs in these campuses, that will require a much larger faculty and much more concerted effort on research and hiring coordination. Additional thought should be put into these issues.”</p>		

			collaboration with the Associate Chair, Recruiting, and the Faculty Council will continue to work on unifying the campuses over the long term	
c. The reviewers noted departmental concerns that graduate student stipends are low compared to global peers, as well as concerns that students may be funded at different levels.	12	“...one very significant source of stress was stipends: graduate student stipends were flagged by faculty and students as very low, with a desire all around to increase them to be competitive with other top CS departments, which is even more critical given the high cost of living in Toronto. However, the department feels that a lack of budgetary transparency prevents them from funding these students more competitively. The faculty also flagged that different students are funded at different amounts, causing inequities.”	<p>The Department has recently changed the funding guarantee for MSc and PhD students to consist of the base (required by SGS) plus a departmental fellowship, which is given to graduate students without substantial external scholarships, stipends, or employment. This has enabled the Department to significantly raise the minimum amount of money that graduate students take home. We have also made it easier for graduate students to get an additional teaching assistantship at UTM or UTSC. In the long term, additional sources of money to support graduate students need to be found. The Department will be working with Advancement on a plan to engage new donors to provide more funds for graduate students, particularly those outside of the more mainstream fields of AI and Machine Learning research.</p> <p>The Department Chair, Vice-Chair and Associate Chair, Graduate Studies will continue to work with A&amp;S and Advancement over the medium term to maximize existing funding and seek new student funding</p>	<p>Short- to medium-term: The Dean recognizes that graduate funding is an ongoing concern. The A&amp;S Advancement office will engage with Computer Science on new fundraising initiatives.</p> <p>Short- to medium-term: Graduate funding is a priority for the Dean. The Faculty funds students within a broader U of T graduate student funding model that guarantees a minimum level of support to students in the funded cohort. Since 2018-19, the Faculty has increased the minimum level of support by \$500 per year. Going forward, the Faculty will increase the minimum level of support by another \$1,000 in 2023-24 and \$500 in 2024-25. This translates to a minimum funding package of \$20,500 in 2024-25. We continue to introduce regular increases to enhance graduate student support.</p> <p>Graduate units may provide graduate students with stipends above the Faculty’s minimum support amount; indeed, many units have specific minimum levels of support that are higher than the Faculty minimum. The Dean’s Office recognizes the important efforts that the Department has been making to support graduate funding.</p>
	13	“the inconsistent, and in many cases non-competitive, stipends are clearly a rising concern that will likely harm the graduate program if it is not addressed.”		
	14	“the funding for graduate students does not match the very high cost of living in Toronto and should be increased.”		

<p>The reviewers observed limited departmental engagement with matters relating to equity, diversity and inclusion, both in the review self-study and in site visit meetings; and further noted that current admissions structures limit opportunities to recruit a diverse undergraduate student body. They emphasized that “more concerted effort, thought, and action” is required in the space of EDI, to develop and support a diverse faculty complement and student body. (In developing your response, please refer to the department’s gradSERU findings and consult with the School of Graduate Studies).</p>	<p>15</p>	<p>“Diversity (EDI). EDI was barely mentioned in the report and in our meetings with faculty, students, and staff. We requested additional information on this topic but worry that it is not a significant priority shared uniformly across the department. It seems to be taken for granted; however, the statistics we see of diversity in the faculty ranks (for example) do not justify that complacency. There did not seem to be a senior leadership role committed to EDI in the associate chairs group. Those who believe they are in charge of EDI were recently appointed and were not sure what their mandate was. More concerted effort, thought, and action is required in EDI.”</p>	<p>An Associate Chair, EDI, has been created with a mandate to: 1) create and implement a process for reporting and addressing EDI-related issues; and 2) to collaboratively work with faculty, staff, and undergraduate and graduate students to increase diversity practices in recruiting in each of these groups. Recruiting processes will now specifically include EDI deliberations. We will also use any available demographic statistics to identify areas where diversity could be increased. We will make equal gender representation a priority in the medium term.</p> <p>A tool for anonymous disclosure for EDI concerns has already been created. The tool has received a small number of responses, with a few describing feelings of isolation and experiences with microaggressions. In consultation with Director, High Risk, Faculty Support &amp; Mental Health, a resource page is in progress to help members of the Department connect with resources if they are experiencing discrimination. We will also work with the EDI Director in A&amp;S to seek guidance on planning and implementing EDI initiatives.</p>	<p>Short- to medium-term: Arts &amp; Science is firmly committed to improving equity, diversity, and inclusion among students, staff and faculty, and indeed, enhancing EDI is identified as a key priority in the A&amp;S 2020-2025 Academic Plan, Leveraging our Strengths. The Faculty added new training for chairs and directors in 2020-21 to ensure that EDI is supported within departments. Furthermore, as a new component of the annual activity report, chairs and directors are now evaluated on their progress in enhancing EDI within their unit. EDI is also a key component of the A&amp;S unit-level planning process, described in our response to #3 above.</p> <p>Short-term: The Faculty of Arts and Science hired a Director of Equity, Diversity &amp; Inclusion in December 2021. The Director is well-positioned to offer guidance to Computer Science on how to best implement EDI initiatives at the departmental level and to advise the Department regarding divisional plans.</p> <p>Short-term: The Vice-Dean Graduate Education will work with SGS and with the Department on leveraging GradSERU (“Graduate Student Experience in the Research University”) survey data to inform graduate studies decisions, including EDI.</p>
	<p>16</p>	<p>“We did not directly hear significant discussion around attempts to increase diversity by tenure-track faculty. For the undergraduates, we have some concern that this responsibility falls on the teaching faculty. For the faculty and graduate level, it was not clear what major planning and efforts have been undertaken to promote diversity.”</p>	<p>With A&amp;S now collecting demographic information of applicants, the Department is planning targeted outreach initiatives aimed at prospective students from underrepresented groups. These initiatives include: Pursue STEM, the PRISM program (intended to help students traditionally</p>	<p>Short-term: The Dean acknowledges the continuing efforts of Computer Science to advance EDI within the Department. As described above, the Director of Equity, Diversity and Inclusion is available to help inform next steps taken by Computer Science.</p>

			<p>underrepresented in CS to engage in research) and Second-year Learning Communities (intended to help students newly admitted to CS, especially those from underrepresented groups, to foster a sense of belonging in CS).</p> <p>The MScAC program has historically had a diverse student body, stemming from a unique admissions process that values traditional admissions metrics (GPA, publications, research and work experiences) but also a diversity of experiences (diversity of coursework, diversity in extra-curriculars, etc.). The admissions committee also considers issues such as cultural norms that may create disadvantages for some students. Some patriarchal societies, for example, restrict access to education for women. Consequently, the MScAC program has students from diverse nationalities, disciplinary backgrounds, socioeconomic circumstances and as well as mature students.</p> <p>In terms of gender balance, the MScAC program exceeds the benchmark for STEM subjects and for the MSc program. The most recent inbound cohort (starting September, 2023) is 34% female. To further increase diversity, the program will actively increase recruitment in areas that have traditionally been under-recruited, such as Latin America, and in disciplines further removed from the quantitative sciences.</p> <p>As stated under response #15, the Associate Chair, EDI will work with representatives of different staff, student and faculty groups</p>	
--	--	--	--	--

			within the department on EDI initiatives over the medium term	
The reviewers recommended that the department consider a strategic visioning exercise around its engagement with industry, and with cognate entities such as the Vector Institute, the Data Sciences Institute and the Schwartz Reisman Institute, with the goal of leveraging the presence of these Institutes and other industrial partners, to benefit the department, as well as the broader University.	17	“The department should consider a strategic visioning exercise around engagement with industry and entities like the Vector Institute, the Data Science Institute, and the Schwartz Reisman Institute to plan how to leverage the presence of these Institutes and other industrial partners to benefit the entire department, and indeed the campus.”	Many faculty members already collaborate with industry partners and other UofT units. Graduate students are beneficiaries of funding from sponsors such as Vector Institute, the Data Science Institute, and the Schwartz Reisman Institute. We agree that strategic partnering at the departmental level rather than at the PI level could result in synergistic gains. Over the medium term, we propose initiating meetings with senior leaders, perhaps at a one-day retreat, to brainstorm and develop creative strategies for supporting each other’s research and vision.	Short- to medium-term: The Dean recognizes the Department is in agreement with this review report recommendation and is exploring options to strengthen engagement with local institutes and industrial partners.  Medium- to long-term: As noted in #3 above, the Department will work with the Dean’s Office on the development of a ULP following the completion of the UTQAP review. The ULP, which will be developed through consultations within the Department, will offer an important opportunity to consider strategies to leverage partnerships with other entities within and beyond the university.
The reviewers encouraged the department, the Faculty of Arts & Science and the University to continue to strategically consider which organizational structure(s) might optimally serve research, teaching, and tri-campus needs in Computer Science, and in related areas.	18	“School of Computing. The department review points out the need for a structure like a School of Computing to achieve the level of autonomy, budget control, and nimbleness that the department needs to thrive during this period of growth and to realize its importance to all fields of study. Further, a school of Computing could develop a strong strategic vision around the complexities of the tri-campus arrangement. We encourage the department, the Faculty of Arts & Science, and the Provost to continue to explore such a structure including developing a strong intellectual argument and justification for the structure. A School of Computing should also develop a thorough plan for engagement or collaboration with related units such as the Data Science Institute, the I-School, Statistics, and Math (in campuses where they are separate).”	The Department would welcome more autonomy and believes that a structure like a School of Computing would provide greater visibility and involvement into the many cross-University initiatives involving computation and computational sciences. As a unit within a large faculty, we are willing to work with A&S over the long term to develop a plan that allows more flexibility. In the meantime, CS faculty and students continue to collaborate with other departments and industry partners to build a solid cross-functional platform for cutting edge research. Additionally, the Department attracts many non-budgetary faculty members who add to the core knowledge and expertise of the Department by teaching graduate courses and supervising students.	Medium- to long-term: At the time of the site visit, discussions were ongoing regarding the possibility of a School for Computational and Data Science. Although the Faculty has not necessarily decided against a School, current discussions are instead focused on the roll-out of Faculty’s plans for a new budget model. The new model, as discussed above, will give more autonomy to units, and would have implications for the administration of a School. Once the new budget model is in place, the Dean’s Office would be happy to re-open the discussion regarding the School if the relevant units wish to pursue it.
	19	“At the University of Toronto, the tri-campus structure is unique, and the school might provide an opportunity to incorporate it in a way that makes it a strength rather than a complication that isolates faculty or students. A School could allow the kind of coordination required to	The Department has experienced precipitous growth over the last few years, resulting in a need to unify a larger group of staff, faculty and students with diverse interests. In the long term, it would be ideal for an	Short- to medium-term: The Dean’s Office recognizes the rapid growth experienced by the Department and the commensurate need for enhanced communication and coordination across all stakeholders. The

		<p>enable strategic recruiting across the tri-campus. Planning for the School should also consider how it relates to other entities such as the Vector Institute, the Data Science Institute, and the cognate departments, so that all parties benefit.”</p>	<p>independently run School of Computer Science to operate more strategically. However, within the current framework of A&amp;S, the Department can continue to build relationships and advocate for change, with the Faculty’s support. For example, the Department is working closely with the A&amp;S in the medium term to consolidate space and bring researchers with like interests into closer proximity (see below).</p>	<p>office of the Vice-Dean Research &amp; Infrastructure will continue to work with the Department on space issues. We encourage the Department to consult with the Vice-Dean, Academic Operations, regarding its efforts to build future partnerships.</p>
<p>The reviewers observed broad community desire for access to common space, to unite the department’s various research groups, and encourage greater collaboration.</p>	<p>20</p>	<p>“Space. There is widespread recognition that a common building is needed to bring together all the disparate research groups into a shared space that will allow deeper collaborations and address the significant fragmentation that the department is experiencing culturally. The faculty and the graduate students mentioned that the department is siloed, and this loss of shared culture was largely attributed to the lack of shared space. New space is also needed for growth of the faculty, staff, and student body. Space was a topic raised many times in the past, including in the last review. We heard significant frustration over the lack of progress on a new shared space to bring the department together.”</p>	<p>Indeed, space is one of the greatest challenges facing CS, as we are fragmented across 4 different buildings, leading to a fragmentation of our community and challenges to effective communication across the department. While there are plans to construct a new building for CS (and cognate departments), it will likely be many years before we can come together in this new building. A&amp;S acknowledges our need for space consolidation, and has been very helpful in developing an interim solution in the medium term.</p> <p>The research group currently experiencing the greatest degree of fragmentation is the Artificial Intelligence (AI) group, whose faculty are divided across the Pratt Building, sorely in need of renovation, and the Vector Institute for AI, located off-campus in the MaRS Discover Building. The Department is working closely with A&amp;S on an interim space solution.</p>	<p>Medium- to long-term: Acknowledging the challenges of increasing space demands for all our A&amp;S units, we are continuing to work with Computer Science to address space needs through the Vice-Dean, Research &amp; Infrastructure portfolio.</p>
	<p>21</p>	<p>“While the new building is constructed, the campus should consider how they can provide improved conditions in the interim.”</p>	<p>See response to #20.</p>	<p>See response to #20.</p>

### **3 Committee on Academic Policy & Programs (AP&P) Findings**

---

The spokesperson for the reading group reported that the review summary had accurately reflected the full review and that the administrative response fully addressed the issues identified. The reviewers suggested that the consideration of cross disciplinary collaborations outside of the Faculty of Arts & Science, especially with the School of Computational, Mathematical, and Data Science would be weaker if it excluded Engineering, and that a brief follow-up report on Equity, Diversity and Inclusion (EDI) in one year would be useful for showing how the short-term plans were unfolding.

Poppy Lockwood, Vice-Dean, Academic Planning responded that the Faculty would be happy to provide a follow-up report on EDI, but noted that they would be submitting an interim monitoring report in 3 years, which presented a realistic time frame that would allow the Faculty to provide a fulsome response on EDI issues. She reported that they had also hired a new director of EDI in the Faculty of Arts and Science.

No follow-up report was requested as the reading group was satisfied with the 3-year interim monitoring report.

### **4 Institutional Executive Summary**

---

The reviewers praised the department as very strong, with exemplary faculty in both research and teaching; and noted that it is ranked as a worldwide leader in many important research areas. Programs appear strong, modern, field-appropriate, well-designed and well-run; and both undergraduate and graduate students appear satisfied with their academic experiences. Given the massive growth of student demand for Computer Science offerings over the past decade, the department has done a good job of administering and making improvements to its programs, and increasing its reputation. They note that the department has been highly successful in recruiting strong junior faculty, who seem supported and engaged; and that teaching stream faculty are instrumental in delivering high-quality and contemporary undergraduate programs. They highlighted a strong sense of faculty community and engagement; that administrative and technical staff are well-organized and service-oriented; and that the department enjoys significant and productive collaborations across the University. Finally the reviewers emphasized the department's effective leadership structure and engaged senior faculty, and observed that the unit appears to have navigated the COVID-19 pandemic very well.

The reviewers recommended that the following issues be addressed: addressing a number of factors that may negatively impact undergraduate student wellbeing and satisfaction, including the structure of program admissions, and the level of available student services; considering future strategies for the MScAC and departmental master's-level programming as a whole; developing a sustainable, strategic approach to faculty leaves and reduced appointments due to industry engagement; strategically expanding faculty complement as opportunities permit, in



response to the significant increase in demand for Computer Science offerings in recent years; continuing to develop and enhance processes and structures for departmental information flow and for shared and collaborative decision making; enhancing strategic coordination and developing a clear and unified tri-campus vision; addressing concerns related to graduate student stipends; undertaking concerted effort, thought, and action related to matters of equity, diversity, and inclusion, to develop and support a diverse faculty complement and student body; considering a strategic visioning exercise around engagement with industry and with cognate entities with the goal of leveraging partnerships to benefit the department and the broader University; giving strategic consideration to which organizational structure(s) might optimally serve research, teaching, and tri-campus needs in Computer Science and in related areas; and considering approaches to address departmental desire for community space, to unite the unit's various research groups, and encourage greater collaboration. The Dean's Administrative Response describes the Faculty and unit's responses to the reviewers' recommendations, including an implementation plan for any changes necessary as a result.

## **5 Monitoring and Date of Next Review**

---

The Dean will provide an interim report to the Vice-Provost, Academic Programs midway between the 2021-22 UTQAP review cycle and the year of the next site visit on the status of the implementation plans.

The next review will be commissioned no later than the 2029-30 review cycle.

## **6 Distribution**

---

On June 30<sup>th</sup> 2024, the Final Assessment Report and Implementation Plan was posted to the Vice-Provost, Academic Programs website and the link provided by email to the Dean of the Faculty of Arts & Science, the Secretaries of AP&P, Academic Board and Governing Council, and the Ontario Universities Council on Quality Assurance. The Dean provided the link to unit/program leadership.