

memorandum

DATE: March 24, 2023

TO: Senate

FROM: Dr. Dwight Deugo, Vice-Provost and Associate Vice-President (Academic), and Chair,

Senate Quality Assurance and Planning Committee

RE: Final Assessment Reports and Executive Summaries

The purpose of this memorandum is to request that Senate approve the Final Assessment Reports and Executive Summaries arising from cyclical program reviews. The request to Senate is based on recommendations from the Senate Quality Assurance and Planning Committee (SQAPC).

The Final Assessment Reports and Executive Summaries are provided pursuant to article 5.4.1. of the provincial Quality Assurance Framework and article 7.2.24 of Carleton's Institutional Quality Assurance Process (IQAP). Article 7.2.24.3 of Carleton's IQAP (passed by Senate in November 2021 and ratified by the Ontario Universities Council on Quality Assurance in April 2022) stipulates that, in approving Final Assessment Reports and Executive Summaries 'the role of SQAPC and Senate is to ensure that due process has been followed and that the conclusions and recommendations contained in the Final Assessment Report and Executive Summary are reasonable in terms of the documentation on which they are based.'

In making their recommendations to Senate and fulfilling their responsibilities under the IQAP, members of SQAPC were provided with all the appendices listed on page 2 of the Final Assessment Reports and Executive Summaries. These appendices constitute the basis for reviewing the process that was followed and assessing the appropriateness of the outcomes.

These appendices are not therefore included with the documentation for Senate. They can, however, be made available to Senators should they so wish.

Any major modifications described in the Implementation Plans, contained within the Final Assessment Reports, are subject to approval by the Senate Committee on Curriculum, Admission, and Studies Policy, the Senate Quality Assurance and Planning Committee (SQAPC) and Senate as outlined in articles 7.4.1 and 5.1 of Carleton's IQAP.

Once approved by Senate, the Final Assessment Reports, Executive Summaries and Implementation Plans will be forwarded to the Ontario Universities' Council on Quality Assurance and reported to Carleton's Board of Governors for information. The Executive Summaries and Implementation Plans will be posted on the website of Carleton University's Office of the Vice-Provost and Associate Vice-President (Academic), as required by the provincial Quality Assurance Framework and Carleton's IQAP.

Omnibus Motion

In order to expedite business with the multiple Final Assessment Reports and Executive Summaries that are subject to Senate approval at this meeting, the following omnibus motion will be moved.

Senators may wish to identify any of the following 4 Final Assessment Reports and Executive Summaries that they feel warrant individual discussion, that will then not be covered by the omnibus motion. Independent motions as set out below will nonetheless be written into the Senate minutes for those Final Assessment Reports and Executive Summaries that Senators agree can be covered by the omnibus motion.

THAT Senate approve the Final Assessment Reports and Executive Summaries arising from the Cyclical Reviews of the programs.

Final Assessment Reports and Executive Summaries

1. Joint Graduate Programs in Electrical and Computer Engineering

SQAPC approval: March 9, 2023

SQAPC Motion:

THAT SQAPC recommends to SENATE the approval of the Final Assessment Report and Executive Summary arising from the cyclical program review of the joint graduate programs in Electrical and Computer Engineering.

Senate Motion March 31, 2023:

THAT Senate approve the Final Assessment Report and Executive Summary arising from the Cyclical Review of the joint graduate programs in Electrical and Computer Engineering.

2. Joint Graduate Programs in Environmental Engineering

SQAPC approval: March 9, 2023

SOAPC Motion:

THAT SQAPC recommends to SENATE the approval of the Final Assessment Report and Executive Summary arising from the cyclical program review of the joint graduate programs in Environmental Engineering.

Senate Motion March 31, 2023:

THAT Senate approve the Final Assessment Report and Executive Summary arising from the Cyclical Review of the joint graduate programs in Environmental Engineering.

3. Undergraduate and Graduate Programs in Film Studies

SQAPC approval: March 9, 2023

SQAPC Motion:

THAT SQAPC recommends to SENATE the approval of the Final Assessment Report and Executive Summary arising from the cyclical program review of the undergraduate and graduate programs in Film Studies.

Senate Motion March 31, 2023:

THAT Senate approve the Final Assessment Report and Executive Summary arising from the Cyclical Review of the undergraduate and graduate programs in Film Studies.

4. Undergraduate and Graduate Programs in Philosophy

SQAPC approval: March 23, 2023

SQAPC Motion:

THAT SQAPC recommends to SENATE the approval of the Final Assessment Report and Executive Summary arising from the cyclical program review of the undergraduate and graduate programs in Philosophy.

Senate Motion March 31, 2023:

THAT Senate approve the Final Assessment Report and Executive Summary arising from the Cyclical Review of the undergraduate and graduate programs in Philosophy.

FINAL ASSESSMENT REPORT Evaluation of Graduate Programs

School of Electrical Engineering and Computer Science (EECS), University of Ottawa Department of Electronics (DOE), Carleton University Department of Systems and Computer Engineering (SYS), Carleton University

Cycle: 2020–2021 Date: December 21, 2022

Ottawa-Carleton Institute for Electrical and Computer Engineering (OCIECE)1

I. Evaluated Programs: Graduate Programs

- Master of Engineering in Electrical and Computer Engineering (MEng)
- Master of Applied Science in Electrical and Computer Engineering (MASc)
- Doctor of Philosophy in Electrical and Computer Engineering (PhD)

II. Outline Evaluation Process (outline of the visit)

The Final Assessment Report for the evaluation of the programs was based on the following documents: (a) the self-study brief produced by the academic unit, (b) the report produced by the external reviewers following their site visit, and (c) the responses to those documents from the Deans, Jacques Beauvais, Faculty of Engineering at the University of Ottawa, and Larry Kostiuk, Faculty of Engineering and Design at Carleton University, Program Director, Pierre Payeur (EECS), Associate Chairs for Graduate Studies, Rony Amaya (DEO) and Amir Banihashemi (SYS).

The site visit, which took place on November 25–26, 2021, was conducted by Yahia Antar, Department of Electrical and Computer Engineering, Royal Military College, and Hamadou Saliah-Hassane, Department of Science and Technology, TELUQ University.

The visit was carried out virtually due to the SARS-CoV-2 pandemic. The evaluators were provided a comprehensive self-study brief that had been previously presented and discussed at the School Assembly prior to revision. In addition, they had the opportunity to see the physical space through a virtual tour.

During the visit, the evaluators met with the following individuals:

- Senior Management: Claire Turenne-Sjolander, Vice-provost (Graduate and Postdoctoral Studies), Ottawa, Dwight Deugo, Vice-Provost and Associate President (Academic), Carleton.
- Program Leadership: Abdulmotaleb El Saddik, OCIECE Director, uOttawa, and Rony Amaya, Associate Director OCIECE, Carleton.
- Department Chairs and Directors: Claude D'Amours, Director, EECS, Ottawa, Jiying Zhao, Graduate Associate Director (Electrical and Computer Engineering), EECS, Ottawa, Yvan Labiche, Chair, SYS, Carleton, Amir Banihashemi, Associate Graduate Chair, SYS, Carleton, Niall Tait, Chair, DOE, Carleton, Rony Amaya, Associate Director OCIECE, Carleton, Abdulmotaleb El Saddik, OCIECE Director, Ottawa.
- Faculty Members from Ottawa and Carleton.
- PhD students from both Ottawa and Carleton.

¹ For this evaluation, the University of Ottawa was the leading institution.

- MASc and MEng students from both Ottawa and Carleton.
- Deans: Jacques Beauvais, Dean, Faculty of Engineering, Ottawa, and Larry Kostiuk, Dean, Faculty of Engineering and Design, Carleton; and Patrice Smith, Dean, Faculty of Graduate and Postdoctoral Affairs, Carleton.
- Ottawa and Carleton Administrative Staff.

III. Summary of Reports on the Quality of Programs²

1. EMPHASIZING THE STRENGTHS AND IDENTIFYING CHALLENGES

STRENGTHS

- The vitality of the programs is demonstrated through its outputs, including international publications.
- Strong emphasis is placed on experiential learning and collaboration with the industry.
- The geographical location, which includes both industry (e.g. Kanata North) and government laboratories, is ideal for training highly qualified personnel.
- There is a synergy with other Engineering programs, including the Ottawa-Carleton Institute for Biomedical Engineering (OCIBME).
- There is a strong alignment with emerging areas such as artificial intelligence-enabled 6G networks, the Internet of Things (IoT), and machine learning.
- Most of the students are well funded.
- The programs provide a unique training environment, where students can take courses at both institutions, University of Ottawa and Carleton University.

CHALLENGES

- Since a large number of courses have not been offered in over three years, there is a need to review the curriculum.
- Students want to have more choices and more up-to-date courses.
- Given the available resources, delivering two master's programs (MEng and MASc) is challenging.
- Ways to strengthen the connection with the Franco-Ontarian community in keeping with the strategic plan of the University of Ottawa.

2. PROGRAM OBJECTIVES

- The external evaluation found that the OCIECE programs were well aligned with the strategic plans at both institutions.
- The hands-on nature of the programs is in line with both institutions' goals of strengthening and expanding experiential learning for all students. This appears to be a distinctive feature of the MASc when compared to similar programs at other Canadian institutions.
- The authors of the self-study reported that the MEng program is working to improve learning outcomes related to "research and scholarship" and "the ability to perform independent self-study."

3. CURRICULUM AND STRUCTURE

• The external reviewers noted that admission requirements are aligned with the learning outcomes. They also indicated that differences exist between the admission

² Based on every document prepared during the assessment process, often extracted verbatim.

process at the two universities. The three academic units as well as the two deans, in their response, indicated that such differences are unavoidable given that the University of Ottawa and Carleton University are two distinct institutions.

- All stakeholders involved in the review agree that the curriculum needs to be reviewed in order to remove courses that have not been offered in several years and to continue the ongoing efforts to create new courses for emerging areas. The leadership of the programs has already started this process.
- The authors of the self-study have identified the need to enhance professional/soft skills.

4. TEACHING, LEARNING AND EVALUATION METHODS

- The external reviewers wrote, "We found that the teaching methodologies are very
 effective and allow the students to achieve and excel in achieving the required
 objectives." They also recommend enhancing exposure to conferences, seminars, and
 societies.
- MEng program enrollment has increased significantly in recent years. Professors and students alike expressed concern about the negative consequences of such large enrollments. The increased class size has limited instructors' ability to assign class projects and engage students in class presentations (In 2021-2022, four courses had enrollments ranging from 36 to 68 students). It has been proposed to form an ad hoc committee to make appropriate recommendations in this regard.

5. STUDENT EXPERIENCE AND GOVERNANCE

- According to the external reviewers, students are generally satisfied with most aspects of their program. However, some students appear to be confused regarding the process for the comprehensive PhD examination (see Recommendation #5).
 Overall, the students interviewed seemed satisfied with the professors' supervision.
- The admission statistics show that there is a need to increase both the number of domestic students and the gender diversity.

6. PHYSICAL AND HUMAN RESOURCES

- "Overall, most of the students are well financially supported. Both universities are
 making good effort toward that. However, some of [the] students at Carleton
 expressed concerns about uniformity and the availability of consistent support."
- A number of indicators point to high employability. However, it would be valuable to develop better mechanisms to track the trajectory of the students after graduation and gain additional insights into this question.

IV. Program Improvements

The programs under evaluation are in conformity with the standards of the discipline. The following recommendations aim at maintaining or increasing the level of quality already achieved by the programs.

Recommendation #1: Improvement of courses offered.

Recommendation #2: Pursue the experimental learning to suit students' expectations.

Recommendation #3: Harmonization of admission and assessment processes in the joint program.

Recommendation #4: Harmonization of financial support.

Recommendation #5: Clarifying comprehensive exams processes for students.

V. Conclusion

OCIECE offers research intensive MASc and PhD programs, as well as a professional Master of Engineering (MEng) program. The external evaluation found "the program[s] to be very effective and provide excellent training," "achieves the objectives," the "outputs of the program[s] in terms of research and training are and continue to be excellent." The geographical location, which includes both government laboratories and Canada's largest technology park (e.g. Kanata North), was noted as one of the strengths of the programs, as well as the alignment with emerging areas and the hands-on nature of the training.

The recommended improvements include a review of the course offerings in order to remove from the curriculum courses that have not been offered in several years, and to develop new courses in emerging areas. Finally, this evaluation proposes that the comprehensive examination processes be reviewed and clarified.

The committee members would like to thank all participants for their contributions to the program evaluation.

Schedule and Timelines

A progress report that outlines the completed actions and subsequent results will be submitted to the evaluation committee by December 15, 2024.

The next cyclical review will take place in no more than seven years, in 2027–2028. The self-study brief must be submitted no later than June 15, 2027.

Université d'Ottawa

University of Ottawa

Unit Response and Action Plan

Faculty:

• Faculty of Engineering

Programs evaluated:

- Master of Engineering in Electrical and Computer Engineering (MEng)
- Master of Applied Science in Electrical and Computer Engineering (MASc)
- Doctor of Philosophy Electrical and Computer Engineering (PhD)

Cyclical review period:

• 2020-2021

Date:

• July 19th, 2022

Note: This document is submitted to the Senate, as well as the Quality Council, and will be published on the University Web site.

General comments:

On April 19th, 2022, the M.Eng., M.A.Sc., and Ph.D. Electrical and Computer Engineering graduate programs were made aware of the External Review Report produced in the context of the cyclical program evaluation. We were extremely pleased with the positive evaluation of our graduate programs. Given that the Electrical and Computer Engineering graduate programs are committed to provide an outstanding training and research experience, we were gratified to see that the external reviewers found our "program to be very effective and provide excellent training and achieves the objectives as outlined in the strategic plans", that "the outputs of the program in terms of research and training are and continue to be excellent", that "students met seem to be happy and enjoying their experiences", and that "it is moving in the right directions and is aligned with the state of the art in research and future directions in emerging areas." In sum, external reviewers confirmed that "the program also complies with the requirements of the Ontario Universities Council for Quality Assurance Audit process." The report makes five recommendations which are all considered high priority. We take the recommendations seriously and feel confident that by addressing them as extensively as possible under our joint administrative structures, our graduate programs will be even more effective. The recommendations and our response, produced jointly by the three units (EECS at UOttawa; SCE and DOE at Carleton) and the Faculty of Engineering, are included below.

Recommendation 1: Improvement on courses offered.

Unit response: Reviewers' comments targeted two main actions to be undertaken: 1) cleaning up courses not delivered for long, and 2) offer some fundamental courses in core areas.

Item 1) A major cleanup was initiated prior to this cyclical evaluation process, leading to 22 courses at EECS, 20 courses at SCE, and 15 courses at DOE to be identified for deletion given that they were not offered for several years, and some became less relevant.

Current status: All EECS courses except one have already been deleted from uOttawa calendar. Administrative procedures are on-going for deleting the remaining course. Deletion of SCE and DOE courses from the calendar at Carleton is programmed for Fall 2022.

Item 2) Our programs already offer fundamental courses in a wide variety of core areas. The offer is continuously revisited and improved in accordance with the arrival of new technologies and market trends. For example, new courses in machine learning, robotics, wireless networks, ubiquitous sensing, smart cities, cloud computing, ethics for AI and robotics, photonics, etc. were introduced over the recent years. Additional courses are planned for the coming years that address areas in demand, in correlation with the hiring of new professors in strategic areas. The latter include courses on predictive control theory, quantum mechanics, data visualization, software systems, cybersecurity. It remains OCIECE's goal to offer courses that meet the evolving demand from industry while exposing our graduate students to a wide variety of much needed fundamental concepts that characterize our domain.

Ottawa decanal response: I agree with the Unit response which addresses the recommendation directly and clearly, and proposes to continue actions already undertaken to cleanup courses not delivered in recent years and to continue to revise the course offer on an ongoing basis.

Carleton decanal response:

With respect to course cleanup, this is a welcome recommendation and fits well with Carleton's renewed interest in honestly representing our course offerings to better meet any expectations of prospective students. As described, progress has been made in this regard, it will continue, and has the full support of the Faculty of Engineering and Design.

With respect to fundamental course offerings, the Faculty of Engineering and Design at Carleton University is fully aligned with the Unit's response.

| Priority Level* | Actions to be undertaken | Assigned to | Timeline | Curriculum change? |
|--------------------|---------------------------------------|---|---------------------------------------|--------------------|
| 1 | Courses cleanup | J. Zhao (grad coordinator, EECS) R. Amaya (grad coordinator, DOE) A. Banihashemi(grad coordinator, SCE) | Fall 2022 Fall 2022 Fall 2022 | No |
| 1 | Improve course offering in core areas | J. Zhao (grad coordinator, EECS) R. Amaya (grad coordinator, DOE) A. Banihashemi(grad coordinator, SCE) | Continuous process with yearly update | Yes |

^{*} PRIORITY LEVEL: 1. URGENT-Immediate action required 2. IMPORTANT-Action required within 18 months (maximum) 3. ADVISED: DEVELOPMENT AND STRATEGY-Action to be discussed and must be in place by mid-cycle (within 4 years)

Recommendation 2: Pursue the experimental learning to suit students' expectation.

Unit response: Reviewers' comments pointed toward two main pathways to expand on experimental learning: 1) invest in lab equipment, and 2) enhance ties with industries and government labs.

Item 1) Graduate students pursue experimental learning largely through the research work they conduct in relation with their thesis, or through project-based learning. While some areas of research may not involve massive infrastructure, research projects conducted in our two faculties of engineering naturally connect with down-to-earth applications and are therefore grounded in experimental learning. Additionally, our three units count on a large number of research laboratories equipped with state-of-the-art technologies covering the numerous specializations of electrical and computer engineering. Students are given the opportunity to acquire hands-on experience on such equipment. The expansion of our research infrastructures is a constant work in progress as it largely depends on securing external grants from agencies such as NSERC or CFI, and on establishing partnerships with industry. All OCIECE faculty members are contributing to this journey, by continuously seeking new grants to develop the research infrastructure. Our faculties were very successful in the recent years at attracting such funding, which led to the opening of new research and training facilities (e.g., the recently opened Smart Connected Vehicles Innovation Centre at uOttawa's Kanata-North campus, the uOttawa-IBM Cyber Range, the Canadian Futuristic Health Data Visualization Center, and the Tissue Engineering & Applied Materials (TEAM) Hub at Carleton). Recent efforts also led to the expansion and modernization of existing research infrastructures on the main campus (e.g., massive labs in the recently built STEM and ARC buildings). In the case of M.Eng. students who are not involved in writing a thesis, a 6-credit project in electrical engineering or an alternative internship in industry, banks, or government agencies exposes them to experiential and experimental learning. As such, many M.Eng. students conduct a 2-semester project under the supervision of OCIECE members and are then given access to their research infrastructure. At the same

Item 2) Interactions with the industry and government labs in the national capital region are already very active. OCIECE members pursue numerous research contracts and industrial partnerships with companies and government agencies in the Ottawa-Gatineau area or elsewhere in North America and abroad. External partnership programs (e.g., NSERC Alliance, Mitacs Accelerate, etc.) are extensively used to secure research funding for such partnerships and consequently provide graduate students with an immersive learning experience while they pursue part of their graduate studies journey on our partners' premises. Collaboration between our research groups and several SMEs is taking place on a continuous basis, while strategic partnerships are also established with major players, such as IBM Canada in cybersecurity, Nokia-Bell, etc. The uOttawa's Kanata-North campus also plays a catalytical role at connecting research with the high-tech industry concentrated in the Kanata area. It is frequent that OCIECE members along with our graduate students perform research, publish articles and file patents in collaboration with industry and government agencies. Our coop offices are also deeply involved in making ties with industry and provide opportunities for our graduate students, especially in the M.Eng. program., to acquire experience. As a result, many receive job offers even before they graduate.

Ottawa decanal response: I agree with the Unit response. Researchers that are engaged in OCIECE have achieved great success recently in CFI-JELF grant applications and in particular are currently fully engaged in the follow-ups to two successful CFI Innovation Fund grant applications that amount to close to \$40M in infrastructure. The launch of the Smart Connected Vehicles Innovation Centre in Kanata North, coupled to these major grants are clear indications of the current major upgrade to the equipment infrastructure that will directly benefit the OCIECE students. In addition, the SCVIC in Kanata North, the Cyber Range, and the presence of uOttawa in the new Hub350 space in Kanata North (in addition to our own facilities) are indications of the significant importance for us of engaging with industry. All of these steps, in addition to the individual researcher engagement activities, will result in a major enhancement of interactions with industry and government currently and in the near future.

^{*} PRIORITY LEVEL: 1. URGENT-IMMEDIATE ACTION REQUIRED 2. IMPORTANT-ACTION REQUIRED WITHIN 18 MONTHS (MAXIMUM) 3. ADVISED: DEVELOPMENT AND STRATEGY-ACTION TO BE DISCUSSED AND MUST BE IN PLACE BY MID-CYCLE (WITHIN 4 YEARS)

Carleton decanal response:

The pathways identified in this recommendation to enhance experimental learnings of the graduate students is acknowledged as something that can always be done better. Making progress in this direction is a partnership between the academics in the Institute and the Universities those members are appointed to, but the structure by which research programs are founded the lead proponents for any such activities are the academics themselves. The Faculty of Engineering and Design then must be supportive to those activities.

With respect to investing in lab equipment, the bulk of these financial resources will have to come from external funding sources, while the universities can contribute modest funds its role is more on finding the right kinds of space for new equipment. The current members of the joint institute, which includes several new hires who are experimentalists, have been ambitious in this regard, and to date we have been able to meet (or in the process of meeting) their space needs. The Faculty of Engineering and Design undertakes space renewal as the academics pursue their experimental needs through external funding agencies.

With respect to enhancing ties with industry and government, the Unit's response shows considerable activities in this area. The Faculty of Engineering and Design is always available to requests by academics who wish university representation in establishing external partnership.

| Priority Level* | Actions to be undertaken | Assigned to | Timeline | Curriculum change? |
|--------------------|--|--|--------------------|--------------------|
| 1 | Invest in research laboratory equipment | All OCIECE members K. Hinzer (Vice-Dean Research, UO) A. Girouard (Ass. Dean Res., Carleton) | Continuous process | No |
| 1 | Develop interactions with industries and government labs | All OCIECE members K Hinzer (Vice-Dean Research, UO) A. Girouard (Ass. Dean Res., Carleton) Coop offices (UO and Carleton) | Continuous process | No |

^{*} PRIORITY LEVEL: 1. URGENT-IMMEDIATE ACTION REQUIRED 2. IMPORTANT-ACTION REQUIRED WITHIN 18 MONTHS (MAXIMUM) 3. ADVISED: DEVELOPMENT AND STRATEGY-ACTION TO BE DISCUSSED AND MUST BE IN PLACE BY MID-CYCLE (WITHIN 4 YEARS)

Recommendation 3: Harmonisation of admission and assessment processes in the joint program.

Unit response: Reviewers' comments pointed out possible discrepancies in the way application files from graduate students are assessed and processed at the two institutions, with Carleton relying on a central admission office and uOttawa rather carrying the task in a faculty-based administrative office, which may lead to variations in the criteria considered for admission.

While the three units ensure that minimum requirements for admission in OCIECE's programs at both universities are set on the same grounds, Carleton and uOttawa are separate institutions with independent central administrations that dictate the general rules and administrative procedures that apply to their respective units and students. Each institution also defines its own admission procedures and strategic recruitment policies that influence the way students gain access to graduate programs and the number of students allowed to enter in each program. As such, a complete harmonization and integration of the admission processes is beyond the reach of OCIECE management for as much as the two independent central administrations are to decide how they want to operate and implement their own model on their respective faculties and units. There also exists some variability in the supervision capability of each unit, which depends on the major trends in research, on the number of active professors, on students' completion time, on new hiring and retirements, etc. For these reasons, the actual intake at each semester varies. As a result, and to efficiently deal with the large volume of applications for admission in our programs that are received every year, it was found that administrative procedures for admission were to better to operate locally at each institution. On the other hand, there remains some coordination between uOttawa and Carleton for the admission of ambivalent cases. Moreover, graduate applicants whose admission is declined at one institution may have their file transferred for consideration at the other institution if they wish.

OCIECE is committed to ensure fairness and equity in the assessment of applications for admission in our graduate programs independently from the institution or academic unit where applications are analyzed. Given the large volume of applications received every year by each unit, OCIECE wants to ensure that admitted graduates at both institutions meet high qualification standards and language requirements, and that they can be successful in our graduate programs. This is actively implemented and validated through graduate courses sharing, where students from uOttawa or Carleton can register to courses offered at the other institution and receive the same credits. It is also supported by forming joint thesis evaluation committees for Master's and Ph.D. students where OCIECE members from both institutions are involved in the evaluation process. On the other hand, each of the three units under the joint institute must follow the rules and procedures imposed by the central administration at their respective institution. The established dialogue must and will continue to take place between the three units, the faculties and the central administrations of uOttawa and Carleton to ensure a smooth integration and delivery of our programs, especially in relation to graduate courses offered, and for the constructive research collaboration to continue to happen between faculty members at the two universities.

Ottawa decanal response: The Unit response is complete and addresses the recommendation appropriately.

Carleton decanal response:

The Faculty of Engineering and Design agrees with the Unit's response to this recommendation.

| Priority | Actions to be undertaken | Assigned to | Timeline | Curriculum |
|----------|--------------------------|-------------|----------|------------|
| Level* | | | | change? |

^{*} PRIORITY LEVEL: 1. URGENT-IMMEDIATE ACTION REQUIRED 2. IMPORTANT-ACTION REQUIRED WITHIN 18 MONTHS (MAXIMUM) 3. ADVISED: DEVELOPMENT AND STRATEGY-ACTION TO BE DISCUSSED AND MUST BE IN PLACE BY MID-CYCLE (WITHIN 4 YEARS)

| 1 | Continue established dialogue between the three units and two faculties to | J. Zhao (grad coordinator, EECS) | Continuous | No |
|---|---|---------------------------------------|------------|----|
| | ensure that admission procedures are compatible though independent, and | R. Amaya (grad coordinator, DOE) | process | |
| | that admission requirements ensure that the quality of admitted graduate | A. Banihashemi(grad coordinator, SCE) | | |
| | students meets high standards. | | | |
| 1 | Continue established dialogue between the two institutions' central | C. Turenne Sjolander (Vice-Provost, | Continuous | No |
| | administrations to ensure that the general rules and admission requirements | Grad. and Postdoc. Studies, uOttawa) | process | |
| | remain in equilibrium. | P. Smith (Dean, Graduate and | • | |
| | | Postdoctoral Affairs, Carleton) | | |

^{*} PRIORITY LEVEL: 1. URGENT-Immediate action required 2. IMPORTANT-Action required within 18 months (maximum) 3. ADVISED: DEVELOPMENT AND STRATEGY-Action to be discussed and must be in place by mid-cycle (within 4 years)

Recommendation 4: Harmonization of the financial support.

Unit response: Reviewers' comments indicated that there may be some concerns about the way financial support is made available to graduate students during their program, while recognizing that such support is also dependent on the financial resources available to the individual professors.

It is indeed a fact that financial support that can be provided to individual graduate students depends on the attraction of research grants by individual OCIECE members, which in turn depends on funding programs managed by external agencies and whose accessibility varies over time, and while the alignment between funding programs and the actual needs of academic researchers often lacks in coherence. As such it is a perpetual challenge for professors to secure research funding and match its availability with that of individual students' graduate program duration to ensure continuous financial support. OCIECE members are actively engaged in the race for funding and committed to leverage all possible opportunities, either through individual initiatives, group-based funding opportunities, or industrial-partnership oriented programs.

In addition, the central administrations of the two universities and the faculties are taking a leadership role through their respective strategic recruitment policies to attract top quality graduate students by offering first-class training possibilities in a research-oriented environment, and by offering financial support via competitive and non-competitive awards and scholarships. Recently, both universities introduced international doctoral tuition fee reduction programs for all international doctoral students to pay the same tuition fees as domestic students. The majority of Ph.D. and M.A.Sc. students also receive teaching assistantships. Those with high admission GPA are offered various forms of internal admission and merit-based scholarships that are matched with additional research assistantship support provided by their thesis supervisor based on their respective research grants. There are also a number of endowment awards that the students can compete for. At uOttawa, forms of financial support are also available specifically to individuals studying in French. Though there can remain discrepancies between the financial support of different students depending on their admission GPA and on the value of research assistantship that they receive, the two universities, as well as OCIECE members acting as thesis supervisors, are investing massively toward the well-being of graduate students so that they can fully concentrate toward their research activities and optimize their learning experience and research productivity.

Beyond internal financial support managed by the two universities, from operational funds or from research grants secured by professors, graduate students have access to a plethora of graduate scholarships offered by NSERC, OGS, FRQNT, Mitacs, and several specialized programs. The two institutions are committed to promote these programs, as much as to support and guide graduate students through their application process. Via central well-organized and committee-centered pre-selection mechanisms that ensure fairness and equity among candidates, and massive time investment from OCIECE members to mentor scholarship applications development and prepare articulated recommendation letters, graduate students are provided with all opportunities to be successful at securing part of their own financial resources through merit-based scholarship programs.

As for recommendation #3 above, Carleton and uOttawa remain separate institutions with independent central administrations that establish the general rules and investment strategies regarding the financial support that can be offered to their respective graduate students. For this reason, a complete harmonization of the financial support is beyond the reach of OCIECE management for as much as central administrations are to decide on how they want to operate and how much resources can be dedicated to internal awards and scholarships.

Ottawa decanal response: The Unit response illustrates well why we are tending towards a better harmonization of financial support yet there will always remain differences not only between the two institutions, but also between individual researchers who are members of OCIECE. This is not unique to this organization, and the competitive nature of grant and scholarship applications to tri-council and other sources remains, the objective of a more complete harmonization of financial support will remain a challenge.

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Carleton decanal response:

The Faculty of Engineering and Design agrees with the Unit's response, but does want to emphasize that Carleton and UOttawa set their policies and processes associated with graduate studies to serve many joint institutes and many more graduate programs that are not joint. For example, on the cost side for the student, the two institutions have different tuition and fee structure, so having a harmonized financial support system may not be the best way to create equity. Lastly, individual graduate student support, separate from the different university structures, depends on the financial resources available to the individual supervisors and their ability to secure those external funds.

| Priority Level* | Actions to be undertaken | Assigned to | Timeline | Curriculum change? |
|--------------------|--|--|---|--------------------|
| 1 | Pursue the development of central funding models at each institution to best support research-oriented graduate students during their program. | C. Turenne Sjolander (Vice-Provost, Grad. and Postdoc. Studies, uOttawa) P. Smith (Dean, Graduate and Postdoctoral Affairs, Carleton) | Continuous process | No |
| 1 | Reinforce the awareness of graduate students about external graduate scholarship opportunities and provide mentorship for applications development | J. Zhao (grad coordinator, EECS) R. Amaya (grad coordinator, DOE) A. Banihashemi(grad coordinator, SCE) | Fall 2022 (next schol. competition) | No |

^{*} PRIORITY LEVEL: 1. URGENT-Immediate action required 2. IMPORTANT-Action required within 18 months (maximum) 3. ADVISED: DEVELOPMENT AND STRATEGY-Action to be discussed and must be in place by mid-cycle (within 4 years)

Recommendation 5: Clarifying comprehensive exams processes for students.

Unit response: Reviewers reported on some doctoral students not having a clear understanding of the requirements and process related to comprehensive Ph.D. examination, which points toward a need to revisit the process and clarify the expectations for all Ph.D. candidates.

The definition of Ph.D. comprehensive examination is only broadly defined in the academic regulations at uOttawa and Carleton. As such, there is indeed an opportunity for OCIECE to clarify the requirements, expectations, and procedure in some form of guidelines to provide a clear roadmap for our doctoral students and reduce their stress level.

At OCIECE, the concept of comprehensive exams refers to the process of validating a Ph.D. student's background in two fields of relevance to electrical and computer engineering, and most preferably in relation with the candidate's specific area of research. The goal is to ensure that the students possess a solid foundation on background knowledge from junior graduate level over which they can build their research and career. The expectations on students' performance at the comprehensive examination generally remain very realistic. Though the procedure and expectations have evolved over time, especially under the recent pressure exercised by universities at large to accelerate graduation within a set timeframe, and by the diversification of the post-graduation job market for Ph.D.'s., absolute failure at comprehensive examination only happens occasionally and in extreme cases.

At any time during the program, doctoral students who wonder about the actual expectations for comprehensive exams can and should consult their supervisor, who always remains the primary resource to reach out to. OCIECE members with doctoral supervision privileges are well-aware of the specific goals, extent, and general practice for comprehensive exams in their respective specialization area. However, and without substituting for supervisors, the availability of more specific guidelines made available to all students registered in our doctoral program would indeed be beneficial. To help address the situation, the respective graduate offices keep track of students who should take the exam at a given time in their Ph.D. program and a memo is sent ahead of time to those individuals explaining the process, timeline, and the actions that the students and their supervisors will need to take.

On the other hand, preparing a guide of practice with clear rules and expectations first requires a strong consensus to be found among the opinions of the many members of OCIECE, which is a challenge. For that matter, inspiration can be found in other faculties who have managed to set up such guidelines but for specific programs only, as well as from other engineering doctoral programs supported by similar joint institutes at uOttawa and Carleton. In the latter case, expectations for comprehensive Ph.D. examination were recently formulated with the objective to accelerate the progress of top talented doctoral students in light of a job market that now reaches far beyond the academic world. But different visions remain among our membership and must also be taken into consideration. Some emphasize the need for Ph.D. candidates to demonstrate a strong and rigorous background in a broad area of electrical and computer engineering, suited for the more traditional path toward an academic career, while others privilege a focused evaluation in a specific area of specialization related to the student's thesis work. Opinions also support a robust filtering stage for recently admitted doctoral students. Moreover, Carleton and uOttawa had come to implement slightly different practices for comprehensive examination, favoring efficiency on one hand with a narrower and predefined set of available topics to choose from and exams to be written at a specific time and only once a year; versus favoring versatility with a broad range of exam topics available among which two can be selected in closer connection with the student's research area and exams that can be written at any time of the year. The latter considerations relate also to the independent administrative structures of the two institutions that support the execution of comprehensive exams and to some extent govern the process.

Ottawa decanal response: I agree with the Unit response and notably with the suggested actions to be undertaken to improve the situation within the constraints that have been described.

^{*} PRIORITY LEVEL: 1. URGENT-IMMEDIATE ACTION REQUIRED 2. IMPORTANT-ACTION REQUIRED WITHIN 18 MONTHS (MAXIMUM) 3. ADVISED: DEVELOPMENT AND STRATEGY-ACTION TO BE DISCUSSED AND MUST BE IN PLACE BY MID-CYCLE (WITHIN 4 YEARS)

Carleton decanal response:

The Faculty of Engineering and Design agrees with the Unit's response to this recommendation, though we encourage departments and institutes to consider the development of a program handbook to pull together the materials that are core elements of process through all stages of the graduate students' progression through their program.

| Priority | Actions to be undertaken | Assigned to | Timeline | Curriculum |
|----------|--|---|-------------|------------|
| Level* | | | | change? |
| 1 | Reconsider the desired objectives and execution process for comprehensive Ph.D. examination in light of alternative models recently introduced in similar programs by other engineering joint institutes and in other faculties. | P. Payeur (OCIECE director) J. Zhao (grad coordinator, EECS) R. Amaya (grad coordinator, DOE) A. Banihashemi(grad coordinator, SCE) | Fall 2022 | No |
| 1 | Discuss with all three units and work toward a consensus among OCIECE members about the desired extent of comprehensive examination across all research areas of OCIECE and define the related expectations in an accessible and realistic manner. | All OCIECE members via J. Zhao (grad coordinator, EECS) R. Amaya (grad coordinator, DOE) A. Banihashemi(grad coordinator, SCE) | Winter 2023 | No |
| 1 | Document and communicate the nature of the comprehensive examination process with clear procedure and general expectations to OCIECE doctoral students at the time of entry in the program. | P. Payeur (OCIECE director) R. Amaya (OCIECE associate director) | Spring 2023 | No |

^{*} PRIORITY LEVEL: 1. URGENT-Immediate action required 2. IMPORTANT-Action required within 18 months (maximum) 3. ADVISED: DEVELOPMENT AND STRATEGY-Action to be discussed and must be in place by mid-cycle (within 4 years)

CARLETON UNIVERSITY COMMITTEE ON QUALITY ASSURANCE

Cyclical Review of the joint graduate programs in Environmental Engineering Executive Summary and Final Assessment Report

This Executive Summary and Final Assessment Report of the cyclical review of Carleton's joint graduate programs in Environmental Engineering are provided pursuant to the provincial Quality Assurance Framework and Carleton's Institutional Quality Assurance Process (IQAP).

EXECUTIVE SUMMARY

The joint graduate programs in Environmental Engineering reside in the Ottawa -Carleton Institute of Environmental Engineering, a unit administered by the Department of Civil and Environmental Engineering in the Faculty of Engineering and Design at Carleton University, the Department of Civil Engineering and the Department of Chemical Engineering in the Faculty of Engineering at the University of Ottawa.

As a consequence of the review, the programs were categorized by Carleton University's Senate Quality Assurance and Planning Committee (SQAPC) as being of good quality. (Carleton's IQAP 7.2.13-7.2.14).

The External Reviewers' report offered a very positive assessment of the programs. Within the context of this positive assessment, the report nonetheless made a number of recommendations for the continuing enhancement of the programs. These recommendations were productively addressed by the Director of the Ottawa -Carleton Institute of Environmental Engineering, the Dean of the School of Engineering and Design at Carleton University, and the Dean of the Faculty of Engineering at the University of Ottawa in responses to the External Reviewers' report and Implementation Plan that was submitted to SQAPC at Carleton University on January 26, 2023.

FINAL ASSESSMENT REPORT

Introduction

The joint graduate programs in Environmental Engineering reside in the Ottawa -Carleton Institute of Environmental Engineering, a unit administered by the Department of Civil and Environmental Engineering in the Faculty of Engineering and Design at Carleton University and the Department of Civil Engineering and the Department of Chemical Engineering in the Faculty of Engineering at the University of Ottawa. This review was conducted pursuant to the Quality Assurance Framework and Carleton's Institutional Quality Assurance Process (IQAP). As a consequence of the review, the programs were categorized by Carleton University's Senate Quality Assurance and Planning Committee (SQAPC) as being of good quality. (Carleton's IQAP 7.2.13-14).

The site visit, which took place on March 8-11, 2022, was conducted by Dr. Viviane Yargeau from McGill University and Dr. Graham Gagnon from Dalhousie University.

The site visit involved formal meetings with the following individuals:

Carleton University

- Provost
- Vice-Provost and Associate Vice-President (Academic)
- Dean, School of Engineering and Design
- Associate Dean, Faculty of Graduate and Postdoctoral Affairs (Academic)
- Director, Ottawa-Carleton Institute for Environmental Engineering
- Chair, Department of Civil and Environmental Engineering
- Associate Chair, Department of Civil and Environmental Engineering

University of Ottawa

- Vice-Provost, Academic Affairs
- Director, Office of Quality Assurance
- Associate Vice-Provost, Graduate and Postdoctoral Studies
- Dean, Faculty of Engineering
- Chair, Department of Civil Engineering
- Chair, Department of Chemical and Biological Engineering
- Associate Directors, Ottawa-Carleton Institute for Environmental Engineering

The review committee also met with faculty members, staff, and graduate students from both institutions.

The External Reviewers' report, submitted on March 17, 2022 offered a very positive assessment of the program.

This Final Assessment Report provides a summary of:

- Strengths of the programs
- Challenges faced by the programs
- Opportunities for program improvement and enhancement
- The Outcome of the Review
- The Implementation Plan

This report draws on five documents:

- The Self-study developed by members of the Ottawa-Carleton Institute for Environmental Engineering (Appendix A)
- The Report of the External Review Committee (Appendix B).
- The response and implementation plan from the Director, Ottawa-Carleton Institute for Environmental Engineering (Appendix C)
- The response from the Dean of the Faculty of Engineering and Design at Carleton University and the Dean of the Faculty of Engineering at the University of Ottawa (Appendix D).
- The internal discussant's recommendation report (Appendix E).

Appendix F contains brief biographies of the members of the External Review Committee.

This Final Assessment Report contains the Implementation Plan (Appendix C) developed by the Director, Ottawa-Carleton Institute for Environmental Engineering and agreed to by the Dean of the Faculty of Engineering and Design at Carleton University and the Dean of the Faculty of Engineering at the University of Ottawa, for the implementation of recommendations for program enhancement identified as part of the cyclical program review process.

The Implementation Plan identifies who is responsible for implementing the agreed upon recommendations, as well as the timelines for implementation and reporting.

Strengths of the programs

The External Reviewers' Report states that

- "Overall, the Institute for Environmental Engineering is highly collaborative and is viewed as a training program that has a strong legacy and has great potential to continue its leadership in graduate training. Faculty members identified the benefits of the institute."
- "The culture of collaboration and sharing of space and equipment as well as the level of coordination and collegiality between the departments and institutions is commendable."
- "The three programs offer high-quality training in environmental engineering and are well supported by Faculty with relevant expertise. The joint institute provides a wider range of expertise to cover the teaching needs of such programs."
- "The institute is at the forefront of research in environmental engineering and attracts graduate students with different backgrounds."
- "The training program is divided into 5 research areas. Throughout the week the committee had many discussions concerning the breadth versus depth options associated with these streams and would see it as an important exercise for the Institute to evaluate the nature of these areas and their requirements for different student trainees, especially at the PhD level."

The Faculty

- "The joint institute provides a critical mass and the wide range of expertise required to achieve the goals of the programs."
- "The joint institute is composed of high caliber researchers with relevant expertise."

Opportunities for program improvement and enhancement

The External Reviewers' Report made 4 recommendations for improvement:

- 1. Define a roadmap for each program, make the information readily available to students and optimize the progress tracking. (Weakness)
- Articulate the MEng program as a separate professional program to minimize the impact of the MEng growth on access to courses to MASc and PhD candidates and on the content/format of the courses to accommodate heterogenicity of the group of students. (Concern)
- 3. Evaluate and manage the impact on space of the growth in the number of MEng, PhD and Faculty, especially in the context of return on campus after a significant growth during the pandemic. (Concern)
- 4. Seize the opportunity to redefine and organize the areas in order to offer a unique training program including sustainability and climate change. (Opportunity)

The Outcome of the Review

As a consequence of the review, the joint graduate programs in Environmental Engineering were categorized by Carleton University's Senate Quality Assurance and Planning Committee (SQAPC) as being of **GOOD QUALITY** (Carleton's IQAP 7.2.13-14).

The Implementation Plan

The recommendations that were put forward as a result of the review process were productively addressed by the Director of the Ottawa-Carleton Institute for Environmental Engineering and agreed to by the Dean of the Faculty of Engineering and Design at Carleton University and the Dean of the Faculty of Engineering at the University of Ottawa in response to the External Reviewers' report and Implementation Plan that was considered by SQAPC on January 26, 2023. The Institute agreed unconditionally to recommendations #1, 2,3, and 4.

It is to be noted that Carleton's IQAP provides for the monitoring of implementation plans. A monitoring report is to be submitted by the academic unit(s) and Faculty Dean(s), and forwarded to SQAPC for its review by June 30th, 2023.

The Next Cyclical Review

The next cyclical review of the joint graduate programs in Environmental Engineering will be conducted during the 2023-2024 academic year.

Environmental Engineering Unit Response to External Reviewers' Report & Implementation Plan Programs Being Reviewed: Joint Graduate Programs (OCIENE)

Note: This document is forwarded to Senate, the Quality Council and posted on the Vice- Provost's external website.

Introduction & General Comments

Please include any general comments regarding the External Reviewers' Report.

The Ottawa-Carleton Institute for Environmental Engineering was pleased to receive the External Reviewers' positive report. Page 1 of the report provides a strong endorsement of the "collaborative" nature of the Institute and the "high-quality training" provided by the Institute. The Reviewers acknowledged that "the institute is at the forefront of research in environmental engineering and attracts graduate students with different backgrounds" and viewed the recent renaming of the 5th breadth area and the additional courses as "an exciting addition to the program". The Reviewers identified one weakness, two concerns and an opportunity for the Institute. How these recommendations will be addressed is outlined in the Unit Response and Implementation Plan table that follows. The response to the External Reviewers' Report and the Implementation Plan represent the consensus view of the three departments participating in the Institute and have been shared with the Deans.

For each recommendation <u>one</u> of the following responses must be selected:

Agreed to unconditionally: used when the unit agrees to and is able to take action on the recommendation without further consultation with any other parties internal or external to the unit.

Agreed to if additional resources permit: used when the unit agrees with the recommendation, however action can only be taken if additional resources are made available. Units must describe the resources needed to implement the recommendation and provide an explanation demonstrating how they plan to obtain those resources. In these cases, discussions with the Deans will normally be required and therefore identified as an action item.

Agreed to in principle: used when the unit agrees with the recommendation, however action is dependent on something other than resources. Units must describe these dependencies and determine what actions, if any, will be taken.

Not agreed to: used when the unit does not agree with the recommendation and therefore will not be taking further action. A rationale must be provided to indicate why the unit does not agree (no action should be associated with this response).

Calendar Changes

If any of the action items you intend to implement will result in calendar changes, please describe what those changes will be. To submit a formal calendar change, please do so using the Courseleaf system.

Hiring

Where an action item requires additional hiring (faculty or staff) the owner should at minimum include the Dean of the faculty and member of the unit.

UNIT RESPONSE AND IMPLEMENTATION PLAN **Programs Being Reviewed:** Prepared by (name/position/unit): Will the Unit Response (choose only one for each **Timeline External Reviewer Recommendation & Categorization Action Item** Owner action recommendation): described 1- Agreed to unconditionally require Agreed to if additional resources permit (describe calendar resources) changes? (Y 3- Agreed to in principle 4- Not agreed to or N) Rationales are required for categories 2, 3 & 4 Agreed to unconditionally While the Institute defines the program Handbook - Fall Ν 1.Define a roadmap for each program, make the Institute information readily available to students and optimize requirements, the sister universities provide Director and 2023 the progress tracking. (Weakness) students with a roadmap via an annual **Associate** OCIENE-specific orientation session and each university has Director at the Orientation its own student tracking system. respective sessions Fall universities 2022 The University of Ottawa provides a tailored roadmap to every OCIENE graduate student (MEng, MASc and PhD students) in the form of a list of milestones related to the student's degree. These milestones are accessible to the students via the online Student Center website. The status of the milestones is updated on the website in real-time so that the students can evaluate their progress in their degree. In addition, the Graduate Studies Office of the Faculty of Engineering sends regular emails to graduate students in the program reminding them of milestones and upcoming deadlines for upcoming milestones. For example, email reminders

with specific directions on how to register for and complete milestones are sent to all OCIENE graduate students for the completion of their Thesis Proposal and Comprehensive Exam (EVG 9998). In light of this identified weakness, the University of Ottawa will enhance communication to the OCIENE graduate students to enhance the use of the online Student Center website. In particular, a tailored orientation for OCIENE graduate students of the University of Ottawa will be created and provided to the graduate students every year starting Fall 2022. This presentation will occur following the general orientation presentation provided by the Graduate Studies Office of the Faculty of Engineering. This new presentation will emphasize the precise use of the Student Center website for students for OCIENE MEng, MASc and PhD students, so that they immediately become engaged with the system. The proposed solution is founded on the successes observed by two other graduate programs in the Faculty of Engineering who recently created tailored orientation presentations for their graduate students. Carleton provides various in-person and online resources that provide guidance to students in terms of program requirements, milestones (graduate student audits), etc. However, this material is located in different locations. To improve the current

| | | situation and address the reviewers' recommendation, Carleton will introduce an OCIENE student handbook to bring all the relevant information together, to better define a roadmap for each program and to provide clear guidelines for tracking student progress. In addition, an OCIENE-specific orientation session will be introduced this Fall 2022. | | | |
|--|---------------------------|---|---|--|------------------|
| 2. Articulate the MEng program as a separate professional program to minimize the impact of the MEng growth on access to courses to MASc and PhD candidates and on the content/format of the courses to accommodate heterogenicity of the group of students. (Concern) | Agreed to unconditionally | Both universities are in the progress of addressing this concern. The University of Ottawa has recently introduced general engineering courses (GNG coded courses) tailored for MEng graduate students in all Faculty of Engineering programs. MEng OCIENE graduate students are required to take a minimum of 20% of their course load (2 out of 10 course equivalents) and a maximum of 60% of their course load (6 out of 10 course equivalents) from GNG courses. These GNG courses include an MEng mandatory 3 credit course (one course equivalent) on professional skills and responsibilities. Optional MEng GNG courses include a 6 credit course (2 course equivalent) that is an industrial Internship project, which is organized by the faculty. The GNG courses have reduced the number of MEng graduate students attending OCIENE specific courses. In particular, the addition of the GNG courses has reduced the MEng student attendance of specified and advanced OCIENE courses that MASc and PhD students require for their research. | Action already initiated by the Vice-Dean, Graduate Studies at uOttawa and the Dean of FED at Carleton. | Calendar changes already implemented at uOttawa. New MEng program under review at Carleton. | N Not for OCIENE |

Hence, enabling the content of these specified courses to remain tailored to graduate students performing thesis-based degrees (MASc and PhD). Introducing GNG courses in the OCIENE program at the University of Ottawa has alleviated the burden of MEng graduate students restricting access and impacting the content/format of graduate courses in the program. It is noted that the graduate program benefits from maintaining MEng students in the program. For example, numerous OCIENE MEng students are excellent students and a portion of this cohort have transitioned to thesis-based degrees in the program. As such, keeping the MEng degree in the OCIENE program at the University of Ottawa has provided an important pathway of recruitment of quality students into the MASc and PhD degrees. Thus, MEng degree will be kept in the OCIENE program at the University of Ottawa. Carleton has proposed a MEng Engineering Practice program that will introduce a separate MEng program outside of the Institute. This will lead to fewer MEng students within the Institute and reduce the demand of MEng students on the graduate course offerings in the department. The Department of Civil and Environmental Engineering at Carleton will teach a number of Civil and Environmental Engineering courses in the proposed MEng Engineering Practice program, which would

| | | allow maintaining ties to potentially recruit research students from the program. Those students will then be transferred to the Environmental Engineering program within the institute. | | |
|--|---------------------------|---|--|---|
| 3. Evaluate and manage the impact on space of the growth in the number of MEng, PhD and Faculty, especially in the context of return on campus after a significant growth during the pandemic. (Concern) | Agreed to unconditionally | The Space Committees of each department and the Faculty of Engineering at the University of Ottawa oversee space allocation for research and graduate students. This committee ensures that all new OCIENE professors receive the space required for their research and also that all incoming OCIENE thesis-based graduate students receive office space. The allocated office space is often coordinated so that it is in close proximity to the student's research space. This is observed in the recent OCIENE professor hires. The University of Ottawa has hired four new OCIENE professors in the years just prior to the pandemic. These professors have been allocated laboratory space and office space for graduate students. Further, existing laboratory space has been renovated for the new hires to set up their research. In addition, a state-of-the-art water resources laboratory was built in 2019 in the new Science, Technology, Engineering and Mathematics (STEM) building at the University of Ottawa. This facility is currently available to accommodate current and future OCIENE professors and | Vice-Dean, Graduate Studies, and Dept Chair at uOttawa and the Dean of FED and Dept Chair at Carleton. | N |

| graduate students. Further, a new |
|---|
| microbiological environmental engineering |
| laboratory was built in 2021 in the existing |
| Colonel By Hall (CBY) engineering building |
| at the University of Ottawa. This new |
| laboratory is also available to |
| accommodate current and future OCIENE |
| professors and graduate students. |
| Furthermore, a new Materials Laboratory |
| has been created. This laboratory is |
| available to recently hired OCIENE faculty |
| (Drs. Foruzanmehr and Kavgic) and future |
| OCIENE faculty conducting materials |
| research. |
| At Carleton, we recognize that research |
| space is a considerable constraint, |
| although it has been relatively less of a |
| constraint in the Environmental |
| Engineering program relative to others |
| within the Faculty of Engineering and |
| Design or the Department of Civil and |
| Environmental Engineering. To address |
| these concerns, a new building will open |
| this year with additional faculty offices and |
| plans are progressing for a new building |
| with new offices and additional laboratory |
| research space within the next 5 years. |
| Note MEng students are not assigned an |
| office but have access to study space across |
| the campus and in the new proposed |
| buildings. |
| |

| 4. Seize the opportunity to redefine and organize the areas in order to offer a unique training program including sustainability and climate change. (Opportunity) | Agreed to unconditionally | Both universities will continue to increase course offerings under the newly named 5 th breadth area – EIA, Sustainability and Climate Change and increase the opportunity for training in sustainability and climate change. For example a new course from the University of Ottawa is being created for the Winter 2023 semester, where this course will be considered for addition to this breadth area. The new course is titled Renewable Energy and Resource Conservation. Carleton recently introduced a Collaborative Specialization in Climate Change (CSCC), which Master's students in Environmental Engineering can complete as part of their program requirements. | Institute Director, Associate Director and Dept Chairs at the respective universities | ongoing | Y as new courses are added |
|--|---------------------------|---|---|---------|----------------------------|
| | | as part of their program requirements. | | | |

CARLETON UNIVERSITY COMMITTEE ON QUALITY ASSURANCE

Cyclical Review of the undergraduate and graduate programs in Film Studies Executive Summary and Final Assessment Report

This Executive Summary and Final Assessment Report of the cyclical review of Carleton's undergraduate and graduate programs in Film Studies are provided pursuant to the provincial Quality Assurance Framework and Carleton's Institutional Quality Assurance Process (IQAP).

EXECUTIVE SUMMARY

The undergraduate and graduate programs in Film Studies reside in the School for Studies in Art and Culture, a unit administered by the Faculty of Arts and Social Science.

As a consequence of the review, the programs were categorized by Carleton University's Senate Quality Assurance and Planning Committee (SQAPC) as being of good quality. (Carleton's IQAP 7.2.13-7.2.14).

The External Reviewers' report offered a very positive assessment of the programs. Within the context of this positive assessment, the report nonetheless made a number of recommendations for the continuing enhancement of the programs. These recommendations were productively addressed by the School for Studies of Art and Culture and the Dean of the Faculty of Arts and Social Science in response to the External Reviewers' report and Implementation on Plan that was submitted to SQAPC on February 09, 2023.

FINAL ASSESSMENT REPORT

Introduction

The undergraduate and graduate programs in Film Studies reside in the School for the Studies in Art and Culture, a unit administered by the Faculty of Arts and Social Science. This review was conducted pursuant to the Quality Assurance Framework and Carleton's Institutional Quality Assurance Process (IQAP). As a consequence of the review, the programs were categorized by Carleton University's Senate Quality Assurance and Planning Committee (SQAPC) as being of good quality. (Carleton's IQAP 7.2.13-14).

The site visit, which took place on September 27-29, 2022, was conducted by Dr. Brenda Austin-Smith from University of Manitoba, and Dr. Liz Czach from the University of Alberta. The site visit involved formal meetings with the Provost, the Vice-Provost and Associate Vice-President (Academic), the Dean of the Faculty of Art and Social Science, the Dean of the Faculty of Graduate and Postdoctoral Affairs, and the Director of the School for Studies in Art and Culture. The review committee also met with faculty members, staff, and undergraduate and graduate students.

The External Reviewers' report, submitted on November 7, 2022 offered a very positive assessment of the program.

This Final Assessment Report provides a summary of:

- Strengths of the programs
- Challenges faced by the programs
- Opportunities for program improvement and enhancement
- The Outcome of the Review
- The Implementation Plan

This report draws on five documents:

- The Self-study developed by members of Film Studies (Appendix A)
- The Report of the External Review Committee (Appendix B).
- The response and implementation plan from the Film Studies (Appendix C)
- The Response from the Dean of the Faculty of Arts and Social Science (Appendix D).
- The internal discussant's recommendation report (Appendix E).

Appendix F contains brief biographies of the members of the External Review Committee.

This Final Assessment Report contains the Implementation Plan (Appendix C) developed by the Film Studies and agreed to by the Dean of the Faculty of Arts and Social Sciences, for the implementation of recommendations for program enhancement identified as part of the cyclical program review process.

The Implementation Plan identifies who is responsible for implementing the agreed upon recommendations, as well as the timelines for implementation and reporting.

Strengths of the programs

General

The External Reviewers' Report states that "based on the submitted Self-Study documents, and on conversations we had with faculty and students especially, we conclude that both programs in Film Studies are aligned with Carleton University's academic mission to share knowledge, serve Ottawa, and support sustainability."

Faculty

Speaking with regard to faculty, the external reviewers' stated:

"The faculty of the Carleton Film Studies program are among the best in the country. The program recruited several members over the last decade, with three of these appointed within the last five years. The quality of the faculty complement cannot be over-stated. Expert teacher-scholars in fields such as cinematic cities, African cinema, philosophies of the moving image, video games, various national cinemas, and mediated genders and sexualities, the Film Studies program faculty represent the mutually supportive relationship between teaching and research. We note that Film Studies faculty are active in every way one could hope for. They contribute to campus initiatives like "Healthy Cities," contribute to the Faculty's EDI committee and to related faculty and student caucuses. Faculty also contribute as editorial board members to disciplinary journals of international renown, such as Screen, Camera Obscura, the Canadian Journal of Film Studies, the Journal of Cinema and Media Studies, and Television and New Media, in addition to contributing to the work of the academic associations and societies affiliated with these and other publications. Faculty publish books, articles, chapters, and book reviews, attend and present at national and international conferences, and lend programming expertise to film festivals such as the Pordenone Silent Film Festival, and the Pan African Film Festival of Ouagadougou."

Students

The external reviewers noted that "the BA program in Film Studies introduces students to foundational terms, practices, and theories central to this international field of inquiry. It does so by contextualizing knowledge of film history and form in a context shaped by Ottawa's place as a centre for official archives (the Library and Archives Canada most obviously) and any number of parallel and counter-archives produced by moving image makers who choose the nation's capital as a site for production and exhibition." They also noted that "After learning more about the different MA streams from students in the program, as well as from faculty, we had no concerns about the utility and wisdom of this approach to graduate teaching. The students we met online were clear in their assessment of this structure as clear, fair, and above all, supportive of student learning outcomes.".

Curriculum

The external reviewers noted that the mode of delivery of the program was appropriate and the "recruitment of new faculty members in the last few years has restored the program to a healthy complement, and has solidified the curriculum's emphasis on global circuits of media production and reception. The intersection of media, identity, gender, and sexuality in culture generally, finds expression in the program's development of courses in transnational film, virtual reality, video games, Indigenous film, film festivals, and queer and transgender cinema. The program-based learning outcomes are consistent with those found in other BA and MA programs across the country. Notable innovations spring from the ability of faculty to attract various kinds of funding for the

development of centres such as the Transgender Media Lab, which supports an array of intertwined teaching and research ventures. The Lab (and the related Transgender Media Portal), the "African Film on Location" course, and the annual student trip to the Toronto International Film Festival, provide Carleton Film Studies with a uniquely inclusive curriculum designed to animate representation and inclusivity in both theory and practice."

Opportunities for program improvement and enhancement

The External Reviewers' Report made 3 recommendations for improvement:

- 1) Increase funding to attract MA students. Funding offers must be competitive with other universities in the region.
- 2) Implement equitable protocols for faculty to access teaching release for service and research projects that exceed normal research and service expectations.
- 3) Infrastructure upgrades both in terms of adequately soundproofed and appropriately equipped rooms must continue to be a priority not only for film studies, but game studies courses as well.

The Outcome of the Review

As a consequence of the review, the undergraduate and graduate programs in Film Studies were categorized by Carleton University's Senate Quality Assurance and Planning Committee (SQAPC) as being of **GOOD QUALITY** (Carleton's IQAP 7.2.13-14).

The Implementation Plan

The recommendations that were put forward as a result of the review process were productively addressed by Film Studies and the Dean of the Faculty of Arts and Social Science, in response to the External Reviewers' report and Implementation Plan that was considered by SQAPC on February 9, 2023. The Unit agreed to all recommendations while noting that additional resources could help facilitate these recommendations.

It is to be noted that Carleton's IQAP provides for the monitoring of implementation plans. A monitoring report is to be submitted by the academic unit(s) and Faculty Dean(s), and forwarded to SQAPC for its review by June 27th, 2025.

The Next Cyclical Review

The next cyclical review of the undergraduate and graduate programs in Film Studies will be conducted during the 2028-29 academic year.

Film Studies

Unit Response to External Reviewers' Report & Implementation Plan Programs Being Reviewed: Undergraduate and Graduate Programs

Note: This document is forwarded to Senate, the Quality Council and posted on the Vice- Provost's external website.

Introduction & General Comments

Please include any general comments regarding the External Reviewers' Report.

We are pleased with the very positive review of our programs which was a welcome endorsement of the quality of our programs, faculty and students. We are honoured that our reviewers committed such considerable time, serious effort and diligence to their work, and we are grateful for the thoughtful recommendations they have made. Our responses follow.

For each recommendation **one** of the following responses must be selected:

Agreed to unconditionally: used when the unit agrees to and is able to take action on the recommendation without further consultation with any other parties internal or external to the unit.

Agreed to if additional resources permit: used when the unit agrees with the recommendation, however action can only be taken if additional resources are made available. Units must describe the resources needed to implement the recommendation and provide an explanation demonstrating how they plan to obtain those resources. In these cases, discussions with the Deans will normally be required and therefore identified as an action item.

Agreed to in principle: used when the unit agrees with the recommendation, however action is dependent on something other than resources. Units must describe these dependencies and determine what actions, if any, will be taken.

Not agreed to: used when the unit does not agree with the recommendation and therefore will not be taking further action. A rationale must be provided to indicate why the unit does not agree (no action should be associated with this response).

Calendar Changes

If any of the action items you intend to implement will result in calendar changes, please describe what those changes will be. To submit a formal calendar change, please do so using the Courseleaf system.

Hiring

Where an action item requires additional hiring (faculty or staff) the owner should at minimum include the Dean of the faculty and member of the unit.

| UNIT RESPONSE AND IMPLEMENTATION PL | AN | | | | |
|--|---|--|---------------------------------------|-----------|--|
| Programs Being Reviewed: Film Studies | | | | | |
| Prepared by (name/position/unit/date): | | | | | |
| External Reviewer Recommendation & Categorization | Unit Response (choose only one for each recommendation): 1- Agreed to unconditionally 2- Agreed to if additional resources permit (describe resources) 3- Agreed to in principle 4- Not agreed to Rationales are required for categories 2, 3 & 4 | Action Item | Owner | Timeline | Will the action described require calendar changes? (Y |
| Increase funding to attract MA students. Funding offers must be competitive with other universities in the region. Opportunity to build upon the strengths of this very impressive program by attracting more graduate students. | 2. Agreed to if additional resources permit. (Funding packages for MA students that makes Film Studies at Carleton able to compete with other Canadian MA Film programs). | We fully endorse this recommendation, which has been referred to the Graduate Supervisor, who will discuss the matter with the Faculty of Graduate and Postgraduate Affairs (FGPA), which is ultimately responsible for graduate student funding packages. | Grad Supervisor and FGPA. | 2022-2023 | N |
| Implement equitable protocols for faculty to access teaching release for service and research projects that exceed normal research and service expectations. Concern. Faculty are encouraged to undertake major research projects or campus-wide service initiatives, but are not being supported to do so. If faculty are disincentivized to pursue these opportunities, the university and program will be negatively impacted. | 2. Agreed to if additional resources permit. (More incentives for faculty who either get big grants or faculty who do extra service in the form of teaching release). | We fully endorse this recommendation, which has been referred to the SSAC Director, who will discuss the matter with the Dean of the Faculty of Arts and Social Sciences, who is ultimately responsible for course releases. | SSAC Director and Dean of FASS. | 2022-2023 | N |

| Infrastructure upgrades both in terms of adequately | 2. Agreed to if additional resources permit. (More | We fully endorse this | Film Studies and | Ongoing | N |
|--|--|---|------------------|---------|---|
| soundproofed and appropriately equipped rooms | resources to necessary infrastructure upgrades | recommendation. Soundproofing for | SSAC with FMP, | | |
| must continue to be a priority not only for film | and the continuation of the lab necessary for | Film Studies rooms on the fourth floor | TLS and ITS. | | |
| studies, but game studies courses as well. | Game Studies). | of St Pat's is planned for summer 2023. | | | |
| | | Film Studies will meet with FMP to | | | |
| Weakness. The infrastructure issues from | | ensure that the soundproofing is on | | | |
| soundproofing, to lights that won't dim, and lack of | | track, meet with TLS and the Library | | | |
| a dedicated game studies space diminishes the | | for the Game Lab, and also meet up | | | |
| teaching and learning environment. | | with ITS and FMP about the | | | |
| | | infrastructure upgrades in Richcraft Hall | | | |
| | | necessary for lectures and screenings. | | | |
| | | Film Studies continues to work with the | | | |
| | | SSAC Technologist, the AVRC, ITS, | | | |
| | | and the library to equip its rooms to | | | |
| | | function properly. | | | |
| | | | | | |
| soundproofing, to lights that won't dim, and lack of a dedicated game studies space diminishes the | | ensure that the soundproofing is on track, meet with TLS and the Library for the Game Lab, and also meet up with ITS and FMP about the infrastructure upgrades in Richcraft Hall necessary for lectures and screenings. Film Studies continues to work with the SSAC Technologist, the AVRC, ITS, and the library to equip its rooms to | | | |

CARLETON UNIVERSITY COMMITTEE ON QUALITY ASSURANCE

Cyclical Review of the undergraduate and graduate programs in Philosophy Executive Summary and Final Assessment Report

This Executive Summary and Final Assessment Report of the cyclical review of Carleton's undergraduate and graduate programs in Philosophy are provided pursuant to the provincial Quality Assurance Framework and Carleton's Institutional Quality Assurance Process (IQAP).

EXECUTIVE SUMMARY

The undergraduate and graduate programs in Philosophy reside in the Department of Philosophy, a unit administered by the Faculty of Arts and Social Science.

As a consequence of the review, the programs were categorized by Carleton University's Senate Quality Assurance and Planning Committee (SQAPC) as being of good quality. (Carleton's IQAP 7.2.13-7.2.14).

The External Reviewers' report offered a very positive assessment of the programs. Within the context of this positive assessment, the report nonetheless made a number of recommendations for the continuing enhancement of the programs. These recommendations were productively addressed by the Chair of the Department of Philosophy and the Dean of the Faculty of Arts and Social Science in response to the External Reviewers' report and Implementation on Plan that was submitted to SQAPC on March 9, 2023.

FINAL ASSESSMENT REPORT

Introduction

The undergraduate and graduate programs in Philosophy reside in the Department of Philosophy, a unit administered by the Faculty of Arts and Social Science. This review was conducted pursuant to the Quality Assurance Framework and Carleton's Institutional Quality Assurance Process (IQAP). As a consequence of the review, the programs were categorized by Carleton University's Senate Quality Assurance and Planning Committee (SQAPC) as being of good quality. (Carleton's IQAP 7.2.13-14).

The site visit, which took place between October 12-14, 2022, was conducted by Dr. Kristin Anders from York University, and Dr. Michael Anderson from the University of Western Ontario. The site visit involved formal meetings with the Provost, the Vice-Provost and Associate Vice-President (Academic), the Dean of the Faculty of Art and Social Science, the Dean of the Faculty of Graduate and Postdoctoral Affairs and the Chair of the Department of Philosophy. The review committee also met with faculty members, staff, and undergraduate and graduate students.

The External Reviewers' report, submitted on November 9, 2022 offered a very positive assessment of the program.

This Final Assessment Report provides a summary of:

- Strengths of the programs
- Challenges faced by the programs
- Opportunities for program improvement and enhancement
- The Outcome of the Review
- The Implementation Plan

This report draws on five documents:

- The Self-study developed by members of the Department of Philosophy (Appendix A)
- The Report of the External Review Committee (Appendix B).
- The response and implementation plan from the Chair of the Department of Philosophy (Appendix C)
- The Response from the Dean of the Faculty of Arts and Social Science (Appendix D).
- The internal discussant's recommendation report (Appendix E).

Appendix F contains brief biographies of the members of the External Review Committee.

This Final Assessment Report contains the Implementation Plan (Appendix C) developed by the Chair of the Philosophy Department and agreed to by the Dean of the Faculty of Arts and Social Sciences for the implementation of recommendations for program enhancement identified as part of the cyclical program review process.

The Implementation Plan identifies who is responsible for implementing the agreed upon recommendations, as well as the timelines for implementation and reporting.

Strengths of the programs

MA program

The External Reviewers' Report states that "The MA Research Seminar appears to be a model for how to move students from an undergraduate, course-focused mindset toward the more independently motivated research orientation necessary for success in graduate school (especially at the PhD level). The individualized attention to students is evident. The success rate of MA students who get accepted into PhD programs seems high, and this speaks volumes about the quality of support and instruction at Carleton."

Innovation

The external reviewers noted that "Faculty offer a number of innovative ideas for further enhancements to the curriculum, on top of those already implemented. Clearly the future of innovation at Carleton is quite bright. We note that faculty have taken on new service roles in supporting the introduction of Indigenous philosophical content to students via a lecture series, and in bringing philosophy into high schools. As we spoke with faculty members we found them to be bubbling over with new ideas for courses, programs, and other innovations. However, we can't recommend following through with these ideas until there is better alignment between resources and burdens across the department's many commitments."

Students

The External Reviewers indicated "There was universal praise for the warmth of the departmental community; it is clearly a very student-experience focused organization. Students report that they always knew who to talk to if they had a question, and responses were always fast."

Public Outreach

The External Reviewers noted that the "A unique strength of the Carleton Philosophy Department is their public outreach efforts via in school programs, the newsletter, and social media. Improvements might be made in translating these efforts into measurable outcomes such as recruitment."

EDI goals

The External Reviewers' Report states that "As outlined in the self-study and underscored in our conversations, there is a clear commitment to EDI goals."

Staff support

The External Reviewers' note that "The department enjoys excellent staff support."

Opportunities for program improvement and enhancement

The External Reviewers' Report made 11 recommendations for improvement:

1. Hire a new faculty member.

- 2. Create a five-year plan with the goal of bringing CI support down to 25% and more equitable sharing of interdisciplinary administrative burdens.
- 3. Hire a humane exterminator/behaviorist to manage the rat problem in the building by making the space less attractive to the rats, and providing them with alternatives.
- 4. Consider recruiting undergraduates by having majors visit introductory courses.
- 5. Consider recruiting MAs by having GPD visit 4th year courses, reconsidering admissions criteria, and holding an in-person open house for admitted students.
- 6. Consider adding programming as a disjunct to the methodology requirement.
- 7. Consider implementing two SSHRC/OGS scholarship workshops in September/early October.
- 8. Consider creating more departmental events and sharing these in a community event calendar to bolster departmental life.
- 9. Consider increasing support for graduate students as they write their thesis in the second year.
- 10. Consider mounting more 1000 level courses with an eye toward building more interdisciplinary connections and recruiting more majors.
- 11. Consider mounting a year-long capstone research experience for philosophy majors. Opportunity

The Outcome of the Review

As a consequence of the review, the undergraduate and graduate programs in Philosophy were categorized by Carleton University's Senate Quality Assurance and Planning Committee (SQAPC) as being of **GOOD QUALITY** (Carleton's IQAP 7.2.13-14).

The Implementation Plan

The recommendations that were put forward as a result of the review process were productively addressed by the Chair of the Department of Philosophy and the Dean of the Faculty of Arts and Social Science in a response to the External Reviewers' report and Implementation Plan that was considered by SQAPC on March 9, 2023. The Department agreed unconditionally to recommendations #2 and 9; and agreed to recommendations #1, 3, 8 and 10 if resources permit. They also agreed in principle to recommendations #6, and 11. While the unit did not agree to recommendations #4, 5, 7 they did provide sufficient rationale.

It is to be noted that Carleton's IQAP provides for the monitoring of implementation plans. A monitoring report is to be submitted by the academic unit and Faculty Dean, and forwarded to SQAPC for its review by June 30, 2025.

The Next Cyclical Review

The next cyclical review of the undergraduate and graduate programs in Philosophy will be conducted during the 2027-28 academic year.

Philosophy

Unit Response to External Reviewers' Report & Implementation Plan Programs Being Reviewed: Undergraduate and Graduate Programs

Note: This document is forwarded to Senate, the Quality Council and posted on the Vice- Provost's external website.

Introduction & General Comments

The Department of Philosophy was pleased to receive the Reviewers' very positive External Reviewers' report on November 28, 2022. This report was shared with our faculty and staff, and we are committed to the continual improvement of our programs to enhance the student, staff, and faculty experience. This document contains both a response to the External Reviewers' Report and an Implementation Plan which have been created in consultation with the Dean.

For each recommendation <u>one</u> of the following responses must be selected:

Agreed to unconditionally: used when the unit agrees to and is able to take action on the recommendation without further consultation with any other parties internal or external to the unit.

Agreed to if additional resources permit: used when the unit agrees with the recommendation, however action can only be taken if additional resources are made available. Units must describe the resources needed to implement the recommendation and provide an explanation demonstrating how they plan to obtain those resources. In these cases, discussions with the Deans will normally be required and therefore identified as an action item.

Agreed to in principle: used when the unit agrees with the recommendation, however action is dependent on something other than resources. Units must describe these dependencies and determine what actions, if any, will be taken.

Not agreed to: used when the unit does not agree with the recommendation and therefore will not be taking further action. A rationale must be provided to indicate why the unit does not agree (no action should be associated with this response).

Calendar Changes

If any of the action items you intend to implement will result in calendar changes, please describe what those changes will be. To submit a formal calendar change, please do so using the Courseleaf system.

Hiring

Where an action item requires additional hiring (faculty or staff) the owner should at minimum include the Dean of the faculty and member of the unit.

UNIT RESPONSE AND IMPLEMENTATION PLAN **Programs Being Reviewed: Philosophy** Prepared by Annie Larivée, Chair, Philosophy Department, 19/12/2022: Unit Response (choose only one for each Will the action **External Reviewer Recommendation &** Action Item Owner Timeline described recommendation): Categorization require calendar 1- Agreed to unconditionally changes? (Y or 2- Agreed to if additional resources permit (describe N) resources) 3- Agreed to in principle 4- Not agreed to Rationales are required for categories 2, 3 & 4 1) Hire a new faculty member. Weakness 2- The Department thoroughly agrees with the The Chair of the Department will discuss Dean of FASS, N *If approved,* Chair. recommendation. this recommendation with the Dean. position The percentage of philosophy courses taught by **Departmental** requested CIs is abnormally high and we have a pressing If our request is approved by the Dean and immediately. hire committee University, we will hire a new colleague. need for a specialist in Ethics. New colleague hired by July 2024 Creation of plan: 1. Implementation of plan: 2. Interdisciplinary administrative burdens 2) Create a five-year plan with the goal of bringing CI Chair, Director Plan to be support down to 25% and more equitable sharing The creation of the plan is agreed to will be discussed with the Dean and the of EPAF. Dean created by Jan. of interdisciplinary administrative burdens. unconditionally. Director of EPAF. 2024 The implementation of the plan is pending the A five-year plan will be created by the Weakness University's approval in hiring new faculty Department in consultation with the member (see #1) and, possibly, Instructor(s). Director of EPAF, and the Dean. 3) Hire a humane exterminator/behaviorist to manage Follow up with ODFASS and Facilities, 2- The Department strongly agrees with the **Immediately Department** the rat problem in the building by making the recommendation (although it should be Management, & Planning (FMP) for an Administrator. space less attractive to the rats, and providing them mentioned that we are only aware of a mice update on managing the rodent problem in FMP. ODFASS problem). The Department has informed the building. with alternatives. Weakness ODFASS and Facilities Management & Planning multiple times of the recurring mice infestation in Paterson Hall, and of the unsafe work conditions it creates. Finding a durable solution to this problem requires the contribution of pest experts.

| 4) Consider recruiting undergraduates by having majors visit introductory courses. Concern | 4- We agree with the spirit of the recommendation. However, a similar strategy is already in place as members of CUPS (Philosophy's student Society) regularly visits first-year classes. We will continue with the strategy in place of having CUPS visit first-year classes. In addition to this, our Undergrad Supervisor will encourage faculty members to promote our BA program in their lower-level courses in November and | N/A | N |
|--|---|-----|---|
| | March. | | |
| 5) Consider recruiting MAs by having GPD visit 4 th year courses, reconsidering admissions criteria, and holding an in-person open house for admitted students. Concern | 4- We agree with the spirit of the recommendation. However, since we already have such strategies in place (as explained in our Self-Study, p. 66), there is no need for additional actions. The Graduate Supervisor visits fourth year seminars (in HUMS for instance) and will continue to do so. Admitted students are invited for one-on-one site visits with the GS, GA, faculty, and current MA students. Given the size of our program, individualized visits work better for us than an open house as they are adapted to each student's needs and availability. With respect to reconsidering admissions criteria, applicants already indicate "Why Carleton" in their statement letter. When the Department fails to meet its 'target' it is typically not because of a shortage of good applicants. Rather, it is due to the fierce competition among the high number of MA programs in Ontario and better funding packages offered elsewhere. Each year, the Department works vigorously on graduate recruitment as a team under the lead of our Graduate Supervisor, and all existing strategies described in our Self-Study will continue. We are also considering improvements | N/A | N |

| | on existing strategies. For instance, since the webinar format is not as popular as it once was, we recently decided to replace our two recruitment webinars with videos explaining the structure and main strengths of the MA program. | | | | |
|---|--|--|--|--|--|
| 6) Consider adding programming as a disjunct to the methodology requirement. Concern | 3- The Department is receptive to the idea of revisiting the methods requirement and broadening the course options to meet it; however, adding a programming course may not be the best or the only way to achieve this. This requires careful consideration. | The Curriculum Committee will examine options at the next CC meeting and report to the Department. An action will be taken only if the Department concludes that a change is needed. | Curriculum Committee, Members of the Department | Decision to be made by September 1st 2023 for implementation in the 2024-25 curriculum | Y (if revised option is recommended and implemented) |
| 7) Consider implementing two SSHRC/OGS scholarship workshops in September/early October. Concern | 4- While the Department agrees with the spirit of the recommendation, such strategies are already in place. EPAF and PHIL (jointly with Cog-Sci) host several SSHRC/OGS workshops in September/October to which all PHIL MA and 4 th year BA students are invited; this strategy will continue. | | | N/A | N |
| 8) Consider creating more departmental events and sharing these in a community event calendar to bolster departmental life. Concern | 2- The pandemic affected our community, but now that life has returned to campus, many events are already happening (e.g., in person Colloquium talks, CUPS sponsored discussion group and pub nights, World Philosophy Day event, Research Day event, etc.). That said, we are willing to do more to support the creation of events. Currently, the Department has financial resources to support a certain number of events. However, the ability to organize events in the future depends on the budgetary resources allocated by the Dean. | The Graduate Administrator will create a community event calendar in collaboration with the Communications Team. The Department will attempt to organize more social events for students (e.g., our own version of FASS's 'Coffee with a Prof'; a winter panel with reception; pizza lunches mid-way through term, etc.). | CUPS Liaison, Communications Team, Departmental and Graduate Administrators; Dean's approval for events budget | Beginning January 2023 | N |

| 9) Consider increasing support for graduate students as they write their thesis in the second year. Opportunity | 1- | The Department will help organize a 'Thesis Writing Group' to provide opportunities for 2 nd year MA students to work on their thesis in a community environment. | Graduate Supervisor, Graduate Administrator | Sept. 2023 | N |
|---|--|--|--|---|---|
| 10) Consider mounting more 1000 level courses with an eye toward building more interdisciplinary connections and recruiting more majors. Opportunity | 2- The Department is currently building interdisciplinary courses (e.g., a cross-listed course with Cog. Sci 'AI: Philosophical and ethical issues' coming Fall 2023) and has recently created several innovative courses open to first-year students ('Phil of pop culture'; 'Phil of emotions'; 'Happiness, well-being, and the good life'; 'Phil of technology', Children, literature, and philosophy'). While we agree with the recommendation of creating more 1000-level interdisciplinary courses, we are limited by the lack of instructors to teach them. | The Department will consider creating additional new courses (e.g., a course in the Ethics of AI) if the actions suggested in items #1 and #2 (above) are implemented and provide the resources needed to offer new courses. | Curriculum Committee, ODFASS, Dean | Decisions to be made by September 1 st 2023 for implementation in the 2024-25 curriculum | Y (if action is implemented) |
| 11) Consider mounting a year-long capstone research experience for philosophy majors. Opportunity | 3- While we agree with the spirit of the recommendation, it cannot be applied as suggested. Indeed, Philosophy majors don't go through a fixed year-by-year program. This makes a year-long capstone research experience hard to implement without affecting the flexibility of our program (which is an asset) and lengthening completion time. We also don't have the resources required to organize and teach a full-year capstone course. However, the Department is willing to explore alternatives options to arouse a sense of community and of achievement in our 4 th year students. | In consultation with the Department, the Curriculum Committee will consider introducing an optional one-term capstone experience (in the form of a research tutorial, for instance). | Curriculum Committee, Members of the Department | Decision to be made by September 1 st 2023 | Y (possibly although not necessarily, as existing course codes could be used) |