



**Dean's/Principal's Follow-Up Report (FUR) for Cyclical Program Review**  
**For submission to the Joint Sub Committee on Quality Assurance**

**Submit report to [yugap@yorku.ca](mailto:yugap@yorku.ca) by: October 31, 2023**

Program	Department of Earth and Space Science and Engineering: Earth and Atmospheric Science (BSc); Undergraduate Programs: Geomatics Engineering (BEng) Space Engineering (BEng) and Graduate program in Earth and Space Science (MSc, PhD) Certificate in Meteorology
Program options (example, BA, MA, PhD)	BEng, BSc, MSc, PhD, Certificate
Faculty and Home Academic Unit	Lassonde School of Engineering
Year of Previous Cyclical Review and Date of Final Assessment Report (FAR)	Site Visit: May 3-4, 2021 FAR Date: May 2022 Follow-up Report Due Date: October 31, 2023
Launch of next Cyclical Program Review	Fall Launch: Fall 2026 Site Visit: Fall of 2027 or Winter of 2028

This Follow-Up Report is the culminating step in the Cyclical Program Review process and is to be completed by the Dean/Principal. The Follow-up Report is reviewed by the Joint Subcommittee on Quality Assurance before being transmitted to the parent committees, ASCP and APPRC, as well as the relevant Faculty Councils.

1. Please provide an update in the chart below on the recommendations in the Implementation Plan outlined in the Final Assessment Report. Comments should be a brief summary of the progress made or challenges encountered.

**IMPLEMENTATION PLAN**

The chart below lays out the implementation plan approved by the Joint Sub-Committee at its meeting in May 2022.

	<b>Recommendation</b>	<b>Action</b>	<b>Responsible for Follow-up</b>	<b>Timeline</b>	<b>Outcomes and Observations (comment on challenges or success)</b>
1.	That the Department consider offering integrated undergraduate and graduate courses.	Integrated courses already exist. No further action to be taken.	n/a	n/a	n/a
2.	That ESSE find better synergies between the three majors and the streams in EATS in the BSc.	A curriculum renewal strategy should be developed and applied to undergraduate programs. Follow steps for curriculum renewal by way of a major modification of the EATS program, including a name change. Admission has been suspended to two streams in	UPD and Chair Dean and Vice-Dean responsible for suspension of admission to streams.	Curriculum renewal to be initiated through 2022 and 2023 with plan to launch renewed program options in Fall 2025. Initial action in December 2021.	The actions with timelines and outcomes are referred to in Section 2.  Admission to the Geomatics Science and Space Science streams in the EATS program is still suspended.

		EATS, effective December 2021.			
3.	That ESSE faculty members be given credit for teaching graduate courses.	Department to re-evaluate its teaching matrix to balance faculty complement and teaching credit allocations.	Chair	To be aligned with work plan mentioned in response to recommendation 2 (See FAR pg. 6).	The department has developed some core graduate courses, which are currently working through the approval process and might be offered in 2024/25. These courses will be required for all ESS graduate students, potentially leading to larger graduate classes.
4.	That the undergraduate program in Geomatics Engineering be better publicized as an option for students in the general year.	Recommendation not accepted. The Dean's Office suspension of admission to the BEng Geomatics Engineering program continues (based on low uptake).	Dean, Vice-Dean	Suspension effective December 2021.	The Dean's Office has provided significant resources to publicize the Geomatics Engineering program to address its historical enrolment challenges.  Suspending new enrolment to the Geomatics Engineering program is continuing due to insufficient demand. In 2021, out of roughly 400 students, only three students selected Geomatics Engineering as their first

					choice. In 2022, only a single student selected Geomatics Engineering as their first choice. Hence, we continued suspending new enrolments.
5.	That the Department proceed with development of a Mechatronics Certificate.	New Certificate proposal to be developed, as per item 3 in the work plan.	Chair	To be approved for Launch in Fall 2022.	The Space Engineering program has developed a Mechatronics Certificate proposal and related course content. The proposal has been approved by Senate. The certificate will be launched in 2024/25.
6.	That experiential learning opportunities be strengthened.	Dean to support innovative development in existing and future programs.	Dean's Office and Department	Ongoing	Experiential components are planned for the renewed program proposals discussed in Section 2.
7.	That a course-based professional MEng program be considered.	Department to evaluate existing graduate program delivery with view to establish a new master's program, Plan for existing graduate programs to submitted to Dean's Office.	Graduate Program Director	April 2022 for NOI for new master's program (anticipated launch in Fall 2025); Plan for existing programs – August 2022.	Lassonde's NOI for an MEng program has been approved. A common template is expected to be launched in the near future. The Geomatics group as well as the Space Engineering group have expressed interest in

					professional program offerings but have not provided any specific proposals to date.
8.	That the staffing levels (administrative and technical) be reviewed.	Ensure balance of new and existing resources to support delivery of new and existing programs. Hire a Program Support Assistant for the Department.	Vice Dean, Lassonde School of Engineering  Operations Manager	November 2021.	A program support assistant has been hired who is fully integrated into the administrative and student outreach and retention activities within the department. A new faculty member will join the department in January 2024. Any additional support needs to be in line with any development of new or modified programs.
9.	That compensation for faculty taking on administrative duties be reviewed.	Formal request for Associate Chair position to be developed by ESSE.	Vice Dean, Lassonde and Chair, ESSE Faculty Relations, York University	January 2022	The department has prepared and proposed a formal Associate Chair role within the department, consolidating the three Undergraduate Program Director roles and replacing them with Curriculum Committee Chairs and the Associate Chair.

10.	That students be better represented in academic governance and department planning.	ESSE to review committee structures to ensure appropriate student representation and make recommendations to the Dean's Office.	Chair	February 2022	ESSE has included graduate student representation in its curriculum committees. The department has rejected undergraduate student representation in curriculum committees and other governance due to the high workload and burden already imposed on its undergraduates. The additional burden of an unpaid, voluntary role on departmental committees is seen as excessive. Regular ESSE student outreach with departmental leadership and the ongoing past practice of curricular town hall meetings is used to ensure student voices are represented in departmental governance decisions.
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11	That the Departmental Work Plan and Dean's responses to the recommendations included therein be fully explored.	In addition to the reviewer recommendations, various working groups and academic leads to enact the relevant recommendations from the Departmental Work Plan.	Dean, Vice-Dean, Chair ESSE, working group members	Renewed and new programs to launch Fall 2025, subject to appropriate approvals.	See Section 2.
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The chart below lays out the implementation plan approved by the Joint Subcommittee at its meeting May 2022

**2. Please describe in the chart below any additional initiatives designed to enhance program quality undertaken since the Cyclical Program Review was completed. Please also describe any quality enhancement initiatives planned to take place between now and the next review.**

<b>Initiative</b>	<b>Responsibility (example, Dean's Office, Program)</b>	<b>Timeline for Completion</b>	<b>Observations</b>
Major modification for EATS to develop CAPS	Program	Launch in Fall 2025	The Atmospheric Science Stream of the EATS program is still accepting students. As a result of discussions about finding better synergies between the EATS streams, the EATS curriculum committee proposed to merge the Atmospheric Science and Space Science streams into a single stream by reducing the focus of Space Science to Planetary Science. In addition, they proposed expanding the stream's Climate Science offerings, which will be called Climate, Atmospheric, and Planetary Science (CAPS). Following the approval of the

			CAPS NOI in July 2023, the group has been working on a major modification proposal.
Space engineering major modification to enhance experiential learning	Program	NOI for Summer 2024 and launch in Fall 2025	The Associate Dean Academic and Students has been supporting initiatives to re-design the Space Engineering program to incorporate a greater emphasis on project-based learning. Consensus has not yet been fully reached regarding the extent of these changes. An initial, small-scale pilot of this curriculum is anticipated in Summer 2024 to inform decision making
Initiatives and developments for Geomatics programming	Program and Dean's Office	Specializations – launch in Fall 2026  Master's – launch in Fall 2025  New program – launch in Fall 2026	At least six meetings have been held with the Associate Dean Academic and Students since early April 2023 to explore options for repurposing Lassonde's expertise in the Geomatics Science and Engineering field. Objectives include: <ul style="list-style-type: none"> <li>• Making good use of colleagues' expertise in the field for the benefit of Lassonde students,</li> <li>• maximizing the enrolments in each course by using it across multiple audiences,</li> <li>• integration with other related fields, and</li> <li>• meeting the needs of employers.</li> </ul> Consensus has been reached around three themes: <ul style="list-style-type: none"> <li>• Undergraduate specializations (streams, minors, certificates) for inclusion in Civil Engineering, Electrical Engineering and Computer Science, and other disciplines.</li> </ul>

			<ul style="list-style-type: none"> <li>• Either a course-based Master's or a professional Master's, depending on projected market demand.</li> <li>• Ultimately a new undergraduate program in the general area of 'global systems.'</li> </ul> <p>A presentation on these initiatives has been made to the Dean's Office. On receiving a go-ahead, NOIs will be prepared and detailed development will commence.</p>
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**3. Please comment on the alignment between the initiatives above and the University Academic Plan.**

The above-described initiatives align with several of the six priorities for action of the University Academic Plan. These initiatives contribute towards making York a more attractive destination for potential students by reinventing our programs to address emerging issues and by building essential 21st century skills into our programs. If a professional Master's degree comes to fruition, it will provide a wider range of credentials to Lassonde students. Some of the above proposals align very well with the United Nations Sustainable Development Goals, in particular, 9 (industry, innovation, and infrastructure), 11 (sustainable cities and communities), 13 (climate action) and 15 (life on land).



**Signature of the Dean(s)/Principal:**

**Date:** November 27, 2023