Ongoing Improvement Progress Report

Instructions and Report Template

As part of the protocols outlined in Western's Institutional Quality Assurance Process (IQAP), to facilitate the continuous improvement of academic programs between review cycles, in connection with the Final Assessment Report (FAR) and Implementation Plan, a monitoring process will include an Ongoing Improvement Progress Report. The outcomes of this report will be considered as part of the program's next cyclical review.

The purpose of this report is to provide an update on the operationalization of the implementation plan following a Cyclical Program Review (or the review of a New Program). This should include a brief summary of actions taken by the Program and the Dean's Office since the completion of the review (usually about three years), as well as an update on the stage of implementation for all applicable items. These include:

- whether the action item(s) are in progress, complete or no longer applicable (with a brief explanation);
- the timelines of each item and how they are progressing or expected to progress, particularly if they are diverting from original timelines in the FAR and Implementation Plan, and;
- a short description of any other program developments and improvements that have taken place following the review.
- For new programs only, an evaluation of the initial administration and resourcing of the program.

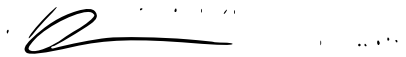
The following report template has been created for the program to report on progress made regarding recommendations presented in the Implementation Plan, and any other relevant program developments and enhancements.

- The program will complete the template and submit it to the faculty Dean's Office for sign-off.
- The program will then submit the completed Ongoing Improvement and Progress Report to the Office of Academic Quality and Enhancement (OAQE). Reports are due by June 30.
    - The OAQE will present all Ongoing Improvement and Progress Reports to SUPR-U/G. Any follow-up questions/concerns will be communicated to the program and Dean's Office by the OAQE.

Ongoing Improvement Progress Report

Program / Faculty Information

Program	Electrical and Computer Engineering, MEng-GDip, MEng, MESc and PhD	**Faculty / Affiliated University College**	Engineering
Approval Dates of the Review	SUPR-G: April 24, 2023 ACA: May 10, 2023 Senate: May 19, 2023	**Year of the Next Review**	2029-2030
Link to the Programs Final Assessment Report (FAR)	*https://www.uwo.ca/pvp/vpacademic/iqap/academic_programs/iqap_reports/faculty_of_engineering_grad/ACA_FAR_ECE.pdf*		
If applicable, submission of follow-up report(s)	*Dates to be populated by the OAQE (if applicable)*		

	Name	**Signature**	**Date**
Program Chair/Director	Xianbin Wang		July 21, 2025
Dean (or delegate)	Lars Rehmann		October 29, 2026

Progress Update on the Implementation Plan

Recommendation #1	Proposed Action and Follow-up	Responsibility	Timeline
Have the M.Eng. students take 5 core courses in their field of specialization and 3 technical electives.	Once approved, implement changes to the course structure of the MEng streams. Collect feedback from students and feedback following the first year of implementation.	Graduate Chair ECE Graduate Committee	By September 2023

Recommendation Implemented

√**Yes** ☐ No ☐ Partially

If no, or partially, is implementation on schedule with the timeline? ☐ Yes ☐ No

Progress

What specific actions have been taken?

This recommendation has been fully implemented through changing the course structure of each MEng specialization. As per the recommendation, the change involves having two course categories, core, and technical electives. The core course category includes 5 courses in the field of specialization of the respective stream, and it emphasizes depth. The technical elective category includes at least 6 courses in each stream where the students are required to select 3 courses. The elective courses include courses offered in ECE department and those in similar field offered by other departments (e.g. MME and Computer Science). This change was proposed as a Major Modification and approved at various institutional levels starting from the ECE Department Graduate Committee to SUPR-G. They have become effective since Fall 2023.

Next Steps (if applicable) *What actions remain? Is there further follow-up?* N/A
Additional Comments Please see the Continuous Program Enhancement part of the report.

Recommendation #6	Proposed Action and Follow-up	Responsibility	Timeline
Eliminate the split technical courses.	Recruit Limited Duty instructors to offer sole MEng courses. In the longer term, tie the instruction of these courses into the justification of faculty hiring requests.	Graduate Chair Dean's Office	By September 2024 (For recruitment of LD instructors)

Recommendation Implemented

☐ Yes ☐ No √ **Partially**

If no, or partially, is implementation on schedule with the timeline? ☐ Yes √ **No**

Progress

What specific actions have been taken?

There were only a few split technical courses offered in our MEng programs. Implementing this recommendation required hiring additional faculty. This has been partially materialized through the recent recruitment of 6 additional faculty colleagues, some of whom have taught MEng courses to eliminate some of the split technical courses. There are a few courses where it is logistically not feasible to split. This has been due to the small overall enrollment in some specialization fields (e.g. Power Systems filed where total enrollment from both MEng and research students has been slightly over 10 students over the past few years), which has precluded the possibility of offering two separate courses.

Next Steps (if applicable)

What actions remain? Is there further follow-up?

Additional Comments

If applicable

Recommendation #7	Proposed Action and Follow-up	Responsibility	Timeline
Introduce an informal mechanism to document and demonstrate the level of research productivity performance of M.ESc. and Ph.D. students.	Use the Pathfinder platform to annually review data on MESc and PhD students research output and present this at the Department Council.	Graduate Chair ECE Graduate Committee	By September 2023

Recommendation Implemented

√**Yes** ☐ No ☐ Partially

If no, or partially, is implementation on schedule with the timeline? √ **Yes** ☐ No

Progress

What specific actions have been taken?

To document and review the research productivity of M.E.Sc. and Ph.D. students, detailed annual report template has been designed using Pathfinder. Students have been using this for their annual reports. Specifically, the ECE graduate annual report template includes the following sections.

a) Research objectives

b) Research progress during the last year since your previous report, or, if this is your first progress report, research progress since the beginning of your program

c) Your key research findings and contributions, with focus on the novelty, relevance, and significance of your new results

d) Future research plan for graduation

e) Self-assessment of your progress, including a reflection on your timeline to program completion, and your goals for the remainder of your program.

Additional sections on “Scholarly Activities”, “Conference Participation”, “Professional Development”, “Thesis” and “Next steps” have

Next Steps (if applicable) *What actions remain? Is there further follow-up? N/A*
Additional Comments *If applicable*

Recommendation #8	**Proposed Action and Follow-up**	**Responsibility**	**Timeline**
Introduce annual research productivity awards to reward M.ESc. and Ph.D. students who publish their research results while they are enrolled in the program.	Review feasibility of this type of initiative. If favorable and feasible, outline and communicate a process and selection criteria.	Graduate Chair ECE Graduate Committee	By January 2024
Recommendation Implemented **√Yes** ☐ No ☐ Partially If no, or partially, is implementation on schedule with the timeline? ☐ **Yes** ☐ No			

Progress

What specific actions have been taken?

The following awards at ECE have been established with detailed terms of references.

• ECE Best Paper Awards (three awards per year, each award is for one published paper with a graduate student nominee as the first author)

• Graduate Research Excellence Award (two awards per year, accumulated productivity, current Ph.D./M.E.Sc, does not include overtime students).

• Best Thesis Awards (two awards per year, one for Ph.D. thesis and one for M.E.Sc. thesis)

The ECE Graduate Award Committee develops all guidelines and issues the call for the nominations as well as adjudicates the nominations.

Next Steps (if applicable)

What actions remain? Is there further follow-up? N/A

Additional Comments

If applicable

Recommendation #10	**Proposed Action and Follow-up**	**Responsibility**	**Timeline**
Ensure that the Library has the required resources to support students and faculty.	Appoint a representative to liaise with the Library to identify the necessary library resources that best support ECE students and faculty members.	Graduate Chair ECE Graduate Committee	By May 2024

Recommendation Implemented

√**Yes** ☐ No ☐ Partially

If no, or partially, is implementation on schedule with the timeline? ☐ **Yes** ☐ No

Progress

What specific actions have been taken?

ECE graduate chair has communicated with Library (Samuel Cassady) regarding the information they need to better support ECE students and faculty. Dr. Fadi AlMahamid has been appointed as ECE library representative.

Next Steps (if applicable)

What actions remain? Is there further follow-up? N/A

Additional Comments

If applicable

Recommendation #12	**Proposed Action and Follow-up**	**Responsibility**	**Timeline**

Set the class size of M.Eng. courses appropriately to maintain high quality learning experience of students.	Hire Limited Duty (LD) instructors to help reduce class sizes in courses such as ECE 9013, ECE 9014, and ECE 9016 with a cap at 60 students per course.	Graduate Chair Dean's Office	By September 2024

Recommendation Implemented

√**Yes** ☐ No ☐ Partially

If no, or partially, is implementation on schedule with the timeline? ☐ Yes ☐ No

Progress

What specific actions have been taken?

Through hiring new faculty colleagues in addition to continued hiring of Limited Duty (LD) instructors, we have been able to add additional course sections where necessary to cap ECE 9013, ECE 9014, and ECE 9016 courses to ~60. In some courses in the Software Engineering field, enrollment has been occasionally larger than 120 students. In such cases, we have tried to split the courses into two

Next Steps (if applicable)

What actions remain? Is there further follow-up? N/A

Additional Comments

If applicable

Recommendation #15	**Proposed Action and Follow-up**	**Responsibility**	**Timeline**

Offer the M.Eng. program via a modular delivery (a.k.a microcredentials).	Begin consultation to determine the feasibility of this recommendation as well as the resource implications to action it.	Graduate Chair ECE Graduate Committee	By September 2024

Recommendation Implemented

☐ Yes ☐ **No** √ ***Partially***

If no, or partially, is implementation on schedule with the timeline? ☐ Yes √ **No**

Progress

What specific actions have been taken?

This recommendation was discussed at the level of Faculty of Engineering. The outcome of this discussion was that implementing this recommendation is currently not feasible. A major reason is the necessity of establishing a relatively complex course evaluation system, including development of evaluation tools consistent with microcredential based evaluation, collecting microcredentials taken by each student before determining the grade etc. These developments require substantial increase in the workload of faculty and staff members of the department, hence the necessity of more resources and budgetary repercussions. Given the recent major decline of MEng students as a result of delays in issuing study permits by IRCC, investment towards implementing this recommendation is not justified.

Next Steps (if applicable)

What actions remain? Is there further follow-up? **No**

Additional Comments

If applicable

Recommendation #16	Proposed Action and Follow-up	Responsibility	Timeline
Reduce the TA workload to a similar level as at other Universities.	Review TA workload distribution with the aim of reducing this workload without affecting TA financial benefits.	Graduate Chair ECE Graduate Committee Associate Dean	By September 2024

Recommendation Implemented

☐ Yes √ No ☐ Partially

If no, or partially, is implementation on schedule with the timeline? ☐ Yes √ No

Progress

The maximum TA workload permitted in the Department is 10 hours per week (140 hours per term), which aligns with Faculty policy and the GTA Collective Agreement. Most graduate students typically take on either 5 or 10 TA hours during the Fall and Winter terms. There are typically only one or two TA positions available in the Summer term. We have compared our TA workload with similar Ontario

Next Steps (if applicable)

What actions remain? Is there further follow-up?

Additional Comments

If applicable

Recommendation #17	Proposed Action and Follow-up	Responsibility	Timeline
Evaluate option of having one centralized graduate office at the Faculty level, in order to find a balance between efficiency and independence.	Review and implement the plan to provide additional administrative staff support centrally through the Faculty Graduate Office to complement the graduate programs in the departments.	Dean's Office	By September 2024

Recommendation Implemented

☐ Yes √ **No** ☐ Partially

If no, or partially, is implementation on schedule with the timeline? ☐ Yes √ No

Progress

We have considered this recommendation and, while we understand the intent behind centralizing support for efficiency, we believe that having a dedicated Graduate Coordinator within the Department provides more direct, timely, and discipline-specific support to our students. The departmental model fosters stronger relationships between coordinators and students, ensures a deeper understanding of academic requirements, and enables more responsive issue resolution.

A centralized model may introduce delays or reduce the level of personalized support our students currently benefit from. That said, we welcome continued collaboration with the Faculty Graduate Office and support the idea of enhanced coordination and resource sharing, provided departmental autonomy and direct student engagement are maintained.

Next Steps (if applicable)

What actions remain? Is there further follow-up?

Additional Comments

If applicable

Note: The total number of expandable text boxes will be dependent on the number of prioritized recommendations appearing in the program's most recent Final Assessment Report (FAR).

Continuous Program Enhancement

What additional initiatives or changes has the program been working on in relation to continuous program improvement?

Our department has proposed to major modifications to enhance the learning outcomes of MEng specializations in the department. The proposals also aim at optimization of resources available to the department. The first proposal includes the introduction of a new specialization called Adaptable ECE specialization which aims at giving MEng students higher level of flexibility in packaging courses into a program that satisfy their technical needs. This specialization aims at phasing out 3 of our current specializations, including 1) Communications and Signal Processing, 2) Power Systems Engineering, and 3) Robotics and Control specializations. It follows a similar structure of core (Type A) and elective courses (Type B) where Type A and B courses provide necessary depth and breadth, respectively. In additional to offering more flexibility to MEng students, it also aims at addressing optimization of resources in anticipation of lower student enrollment in current MEng specializations. This specialization will become effective in fall 2026.

The other proposal includes the introduction a new MEng project-based option which involves substituting the current project milestone, which is equivalent to 1.0 course credit, by a major research project which is equivalent to 1.5 credits course. The additional 0.5 credit will be compensated for through eliminating 0.5 technical elective (Type B) credit from the required courses. This proposal follow the objectives below:

- Development of a clear pathway and providing a platform for MEng students interested in research-based careers or in transferring to MESc/PhD programs, hence potentially making our MEng program more attractive
- Providing a platform for ECE faculty to establish more confidence in the MEng student qualification assessment before offering MESc/PhD position
- MEng students who select the new option will have a better understanding of MESc/PhD program requirements, hence making more informed decisions about joining a research program, leading to improved attrition rate
- Feasibility of preparing manuscripts and publication of research findings within the course of the major research project
- Avoiding long waits and uncertainty of visa process experienced by ECE faculty

The first proposal has been approved at the ECE Department and Faculty levels before it was approved by SUPR-G on June 23, 2025. The second proposal was approved at the ECE Department and Faculty levels and is scheduled to be discussed in the SUPR-G meeting scheduled in October 2025.