FINAL ASSESSMENT REPORT
Executive Summary
Cyclical Program Review

Degree Program:	**MSc/PhD Applied Bioscience**
Components:	**Fields:** **Biomolecular Science** **Ecosystem Health** **Forensic Bioscience** **Human Health Biology**
Dean:	**Dr. Ken Wilson**
Date:	**September 9, 2025**

Under Ontario Tech University's Institutional Quality Assurance Process (IQAP) and the Ontario Quality Assurance Framework (QAF), all programs are subject to a comprehensive review at least/at minimum every eight years to ensure that they continue to meet provincial quality assurance requirements and to support their ongoing rigour and coherence.

In academic years 2022-2024 a program review was scheduled for the MSc/PhD Applied Bioscience programs. This is the second review for this program. A timeline of the review is provided below.

Program Review Timeline	Date
Program Review start date:	November 8, 2022
Self Study submitted/approved:	October 30, 2024
Site Visit:	March 6-7, 2025
External Reviewers Report received:	April 17, 2025
Program Response received:	May 16, 2025
Decanal Response received:	June 20, 2025

In the self-study, the reviewers were asked to comment on the structure and delivery of the curriculum (course offerings, thesis timelines), the availability and capacity of program resources (faculty, staff, and facilities), and the support provided at both the faculty level and through the School of Postdoctoral and Graduate Studies. The reviewers were also asked to examine the graduate student experience, emphasizing opportunities for interaction, learning environment, and program culture, as well as the adequacy of student support in terms of space, resources, and internal funding.

The review consisted of two external reviewers. During the hybrid site visit – day 1 virtual, day 2 in-person – the reviewers met with the following groups and individuals:

Dr. Lori Livingston, Provost & VP Academic
Dr. Ken Wilson, Dean - Faculty of Science
Joe Stokes, Acting Dean - School of Graduate and Postdoctoral Studies
Dr. Sean Forrester, Associate Dean of Science
Dr. Dario Bonnetta, Chair of Internal Assessment Team
Catie Sahadath, Associate University Librarian
Staff from the School of Graduate and Postdoctoral Studies
Faculty, Staff and Students from the Faculty of Science
Members of the Internal Assessment Team

In the External Reviewers' Report, the reviewers noted that the Applied Bioscience graduate programs are well-structured, offering a strong balance between coursework and research, supported by high-quality faculty and well-equipped laboratories. However, they also pointed out areas for improvement, including internal communication, student spaces, course offerings, and financial support. Additionally, they highlighted opportunities to enhance student recruitment, expand shared research infrastructure, and implement a faculty renewal plan to sustain and grow the program's excellence.

The external reviewers identified thirteen recommendations identifying specific steps to be taken to improve the program. The themes arising from the report suggest enhancing student support through clearer expectations, streamlined processes, improved communication, and enriched learning environments. The complete list of recommendations is available in the Implementation Plan.

A Final Assessment Report (FAR) has been prepared to synthesize the reports and recommendations resulting from the review, identifying the strengths of the program as well as the opportunities for program improvement and enhancement. The Implementation Plan (IP) presents a timeline of the follow-up and resource requirements addressing the recommendations from the external reviewers' report. Both documents, accompanied by this Executive Summary (ES), to be delivered to the appropriate standing committee of Academic Council (USC/GSC) and approved on September 23, 2025.

Governance	Document(s)	Type of review	Date
Faculty Council	IP	Feedback	September 9, 2025
Resource Committee	IP	Resource review	September 9, 2025
USC/GSC	FAR, ES, IP	Approval	September 23, 2025
Quality Council	FAR, ES, IP	QAF requirement	
Academic Council	ES, IP	For information	
Board of Governors	ES, IP	For information	
Corporate Website	ES, IP	QAF requirement	

Due Date for 18-Month Follow-up Report: December 21, 2026

Date of Next Cyclical Review: 2030-2032
Timeframe for associated site visit: Winter 2031

IMPLEMENTATION PLAN
September 9, 2025
MSc/PhD Applied Bioscience
Cyclical Program Review
Dean: Dr. Ken Wilson

The Implementation Plan is a critical outcome of the Cyclical Program Review process. The Dean solicits feedback on the Implementation Plan through Faculty Council and the plan is reviewed by the Provost, through the Academic Resource Committee (ARC), to examine resource implications and allocations. A Final Assessment Report (FAR) and Executive Summary are prepared synthesizing the program review reports and responses, following review of the Implementation Plan by the ARC. The plan proceeds through Ontario Tech's governance process and is posted on the corporate website.

The table below presents a timeline of the follow-up and resource requirements addressing the recommendations from the external reviewers' report.

Recommendation *(corresponding # from reviewers' report)*		**Action Item(s)**	**Specify role of person responsible**	**Timeline for action and monitoring**	**Resource Requirements**
1.	a) Graduate students have an advisory committee 4-8 months after starting their studies to present a plan for their MSc or PhD thesis and present any data generated to date, with annual committee meetings occurring thereafter.	Revise and publish graduate student handbook and program requirements on APBS website	GPD, Dean's Office	Fall 2025	

	b) The Graduate Program Assistant should track meetings and give reminders to students/supervisors when committee meetings are overdue. c) The new Graduate Student APBS Supervisory Committee Form be re-evaluated by all APBS faculty members, simplify the form, and completed together at the conclusion of each committee meeting. We suggest that no evaluation metrics be included in the form, but rather focus on written feedback and documentation of progress.	Track completions of program requirements and milestones Follows from above	GPD, Dean's Office GPD, Dean's Office	Fall 2025 Fall 2025	
2.	Develop a student-supervisor expectation form that must be completed within the first four months of a student's academic study. Example: https://www.uwinnipeg.ca/graduate-studies/docs/current-student/thesis-documents-and-forms/graduate-student-supervisor-expectations-form.pdf	Form to be developed and shared with the program faculty for approval	GPD, Dean's Office	Fall 2025	SGPS

3.	a) Creation of a program specific Handbook to distribute during the first week to keep students informed of expectations, procedures, and where to get help (emulating the current handbook distributed to Health Science graduate students). b) Enhance web presence, including a dedicated and active APBS microsite to provide up-to-date information to graduate students.	Handbook to be developed (see 1). Website redesign underway	GPD, Dean's Office GPD, Dean's Office	Fall 2025 Fall 2025	
4.	Recommend additional support from the FSci Graduate Program Assistant and back-up from the APBS Grad Program Director and/or Associate Dean of Science Grad Students. This would be in addition to the SGPS admin support providing support more broadly for all the graduate students in the Faculty. This will provide consistent messaging and clarity on completing forms/requirements specific to APBS students.	We received permission to hire a 1-year term program assistant who will help support the graduate programs in the Faculty of Science They will help with the website redesign, graduate handbook, and tracking of student milestone completions	Dean's Office	Fall 2025	

5.	a) Recommend additional scholarship (block) funding be provided to students across the board to attract and retain graduate students, and allow them to focus on their research and studies such that they graduate on time and with reduced anxiety. b) Develop an emergency fund be put in place for grad students, especially as they write up their theses.	Student support is a major issue at Ontario Tech, and across the PSE sector. We agree that it is crucial to provide higher stipends for students. We will continue to advocate at the institutional level and with national funding agencies to increase support. We will make sure that our webpage, the grad handbook, and student-supervisor agreement note emergency student supports and provide contact information. Will work on fundraising for an emergency fund	GPD, Dean of Science GPD, Dean's Office, Dean of Science	on-going Fall/Winter 2025/26	SGPS Advancement, SGPS
6.	Recommend easing logistical and financial burdens on students by: a) Streamlining internal review by shortening the advisory committee's review period from 8 weeks to 4–6 weeks.	Will add this to the handbook	GPD, Dean's Office, Dean of Science	Fall 2025	

	b) Extending the tuition fee deadline (e.g., to November 1) or introducing a prorated fee structure to give students adequate time to make required thesis corrections without financial penalty.	Will advocate for this with SGPS	GPD, Dean of Science	On-going	SGPS
7.	We recommend that grad office space be re-evaluated to include dedicated desks for individual students who need them during the writing of their thesis (or for other specific reasons), secure storage space for exams/papers they are grading as part of their TAship, and to ensure fairness of office space distribution amongst students.	Will evaluate space availability	Dean of Science	Fall/Winter 2025/26	
8.	Develop a plan to offer additional elective courses on a regular basis that are better tailored to APBS students. (ie. cross-list 4th year undergraduate courses with graduate courses; identify/recommend courses offered external to Ontario Tech as potential elective courses, etc.)	APBS and BIOL programs are currently being reviewed with a view to cross-listing 4th-year and grad courses	GPD, Dean of Science	Fall 2025	
9.	Re-evaluate and standardize the format of the candidacy exam as a result of the MSc-PhD transition seeming unclear to students.	Underway, will be part of the new grad student handbook	GPD	Fall 2025	SGPS

10.	APBS students raised concern about confusion on the structure and ability to receive a budget for a graduate student association (across the Faculty of Science).	We will support the students in developing a new set of governance documents for their association. Will also connect the grad students in the various Faculty of Science programs to ease the governance burden on students	GPD, Dean of Science	Fall 2025	
11.	To further enhance research and funding opportunities, the following improvements are suggested: a) Establish a shared equipment area (e.g., common-use/user-fee model) to support research and institutional or multi-PI grant applications. b) Improve proximity between teaching and research labs to enable shared maintenance by technicians. c) Create additional communal research space to support faculty expansion, attract equipment grants, and increase graduate student enrollment and research opportunities.	Under review, will be part of the Molecular Diagnostics program development Under review, will be part of the Molecular Diagnostics program development Under review, will be part of the Molecular Diagnostics program development	GPD, Dean of Science GPD, Dean of Science GPD, Dean of Science	Winter 2026 Winter 2026 Winter 2026	VP Research

12.	Consider flexibility with regards to admissions on a case-by-case basis for students with alternate backgrounds (ie. college degree in Biology). This may attract high quality students that do not meet the traditional requirements and may also help bolster enrollment.	An admissions policy addendum will be developed to allow exceptional applicants with non-standard academic backgrounds (e.g., college diplomas or international credentials) to be considered on a case-by-case basis.	GPD, Dean of Science	Fall 2025	SGPS
13.	The APBS program appears to be at a bare minimum population size, and are vulnerable to high quality faculty leaving the unit. We recommend that an additional faculty hire be considered (for example in the area of bioinformatics / computational biology, which is inherently interdisciplinary and a longer-term (~5 year) faculty renewal plan for APBS be put in place.	A faculty complement planning exercise will be performed	Dean of Science, APBS Faculty	Winter 2026	

*The Dean shall be responsible for monitoring and reporting on the Implementation Plan.

Recommendations not Addressed and Rationale: N/A

Due Date for 18-Month Follow-up Report: December 21, 2026
Date of Next Cyclical Review: 2030-2032