

**UNIVERSITY OF WINDSOR**  
**CYCLICAL PROGRAM REVIEW (CPR)**  
**FINAL ASSESSMENT REPORT AND IMPLEMENTATION PLAN: CHEMISTRY AND BIOCHEMISTRY**  
**UNDERGRADUATE AND GRADUATE PROGRAMS**  
January 2026

**Executive Summary of the Cyclical Program Review of the Department of Chemistry and Biochemistry Programs**

In accordance with the University's Institutional Quality Assurance Process (IQAP), this final assessment report provides a synthesis of the external review and the internal responses of the undergraduate and graduate programs in the Department of Chemistry and Biochemistry.

In addition to identifying the strengths of the programs, together with opportunities for program improvement and enhancement, the report prioritizes the recommendations that have been selected for implementation and sets out a plan (including the agent(s) responsible for addressing the recommendations and deadline dates) for follow-through. Timelines for monitoring the implementation of the recommendations are built into the process, with areas reporting mid-cycle on their progress to the Senate Program Development Committee, or earlier where there are significant concerns requiring urgent follow-up.

The Department of Chemistry and Biochemistry's 2021-2022 Self-Study submitted to the Office of Quality Assurance on August 23, 2024, included: 1) a summary of recommendations and actions from the last review; 2) descriptions and an analysis of the programs, their learning outcomes, curriculum structure, and student experience; 3) information on enrolments as well as financial, physical, and human resources; and 4) the program data including the standard data package provided by the Office of Quality Assurance. Included in the appendices to the Self-Study were faculty member CVs, course descriptions, and syllabi.

The Department of Chemistry and Biochemistry programs were reviewed by Dr. Christopher Wiebe (Department of Chemistry, University of Winnipeg), Dr. Elizabeth Gillies (Department of Chemistry, Western University), and Christopher Tindale (Department of Philosophy, University of Windsor). In addition to assessing the Self-Study, the Review Team conducted a two-day on-site visit on February 24-25, 2025, which included meetings with faculty, students, administrative and technical staff, academic librarian, Departmental Committees, the Head (and future Head) of the Department of Chemistry and Biochemistry, Co-op faculty support, the Dean of Science, the Associate Vice-President, Academic, and the Dean of the Faculty of Graduate Studies.

Although the Review Team's report (March 27, 2025) noted the delay in completing the Self-Study and resulting concerns about the currency of some of the information in the document, they also noted that information gaps were, for the most part, addressed during the site visit. Overall, the Review Team confirmed that the undergraduate and graduate programs meet the IQAP evaluation criteria and are aligned with the University's mission, vision, and strategic plan. Admissions requirements and program requirements are clear, appropriate, and aligned with degree-level expectations. Program learning outcomes also are clearly mapped to university and COU-approved degree-level expectations. The Review Team also commended the Department on its early inclusion of undergraduate students in research, and the provision experiential learning opportunities at both the undergraduate and graduate levels. Students have many opportunities to engage and collaborate with faculty on research projects and with local industry through the co-op program.

The Review Team noted that the programs are delivered by research-intensive faculty with diverse areas of expertise, all dedicated to providing an exceptional and supportive graduate and undergraduate student experience. These observations were supported by feedback received from students. The Review Team noted that "[t]he department punches above its weight in terms of research as indicated by the number of awards, funding, and publications. Many of these publications include undergraduates. There are also indicators of excellence in undergraduate teaching as evidenced through awards." (ER, p. 13) The program also demonstrates success in attracting and training high-achieving students, as shown by the number of undergraduates who continue as graduate students within the department.

The Review Team did identify a few areas for improvement. Although there is evidence of scholarly output from undergraduate students, a standard tracking mechanism to provide accurate data on the number of undergraduate research opportunities might enhance recruitment and marketing. Some concerns were also expressed about undergraduate completion times, with a plan to address these through improved mentoring. In terms of graduate programs, while graduate students generally complete their programs on time, the process for MSc to PhD transfers could be improved. More significant areas for improvement relate to anticipated faculty retirements and departures, underscoring the need in the near future for a strategic hiring plan, as well as for infrastructure renewal and associated technical support.

The Head of the Department of Chemistry and Biochemistry and the Dean of the Faculty of Science submitted their responses to the External Reviewers' Report (May 12, 2025 and May 23, 2025, respectively), addressing the recommendations, identifying follow-up actions, and providing clarification or corrections, as appropriate. The Senate Program Development Committee (PDC) Final Assessment Report and Implementation Plan (January 2026) considered all the above documentation. The Executive Summary and Implementation Plan, along with any response from the area on the final recommendations, were submitted to Senate in February 2026.

### **Final Recommendations and Implementation Plan (in priority order)**

*Final recommendations were arrived at by the Program Development Committee, following a review and assessment of the External Reviewers report and the response from the Dean of the Faculty*

**Recommendation 1:** That the Department create a task force to identify infrastructure priorities along with a plan to acquire the instruments through avenues such as the CFI JELF, NSERC RTI, and other potential funding mechanisms.

**Agents:** Head, Departmental Facilities and Planning Committee, Dean of Science, Office of the VPRI

**Completion by:** Fall 2026 or by the next Cyclical Program Review (2027-2028)

**Recommendation 2:** That the Department create a strategic hiring plan regarding short-term and longer-term personnel needs in collaboration with the Dean of Science, to ensure readiness as soon as budgets allow.

**Agents:** Head, Dean of Science

**Completion by:** Fall 2026

**Recommendation 3:** That the Department, working with the Office of Enrolment Management, the Registrar's Office, and Institutional Analysis, review local enrolment data with a view to identifying potential outreach and advertising opportunities to promote the undergraduate programs to local high school students (eg, by highlighting potential careers for chemistry graduates).

**Agents:** Head, the Department's Council for Attraction, Retention, and Engagement (CARE), Office of Enrolment Management, the Registrar's Office, and Institutional Analysis

**Completion by:** Fall 2026 or by the next Cyclical Program Review (2027-2028)