

Executive Summary and Implementation Plan

Quality Assurance Cyclical Program Review

Department of Computer Science

February 2016

In accordance with the Lakehead University Institutional Quality Assurance Process (IQAP), the Department of Computer Science submitted a self-study (January 2014). Volume 1 presented the program descriptions and outcomes, an analytical assessment of their programs and program metrics including results from a student survey along with institutional information and statistical data. Volumes 2 and 3, respectively, provided a collection of the program course outlines and the CV's for each full-time member in the Department.

Two external reviewers and one internal reviewer, selected by the Senate Academic Quality Assurance Sub-committee (SAC-QA) from a set of proposed reviewers, examined the materials and completed a two-day site visit in April 2014. The visit included interviews with the Provost and Vice-President (Academic)/Deputy Provost, Dean of the Faculty of Science and Environmental Studies, Dean of Graduate Studies, Manager of Graduate Studies Office, Associate Vice-President Research and Innovation, Program Chair, Graduate Coordinator, tenured faculty, Manager Computing Services and ERP Support, support staff (including Technical Services and Co-operative Education), University Librarian, several alumni and current undergraduate and graduate students.

In their report, submitted June 2014, the Review Team provided feedback that describes how the Computer Science programs meet the Quality Assurance Framework evaluation criteria and are consistent with the University's mission and academic priorities. They reported that the admission standards, curriculum structure and delivery, and teaching and assessment methods are appropriate, reflect the current state of the discipline, and are effective in preparing graduates to meet defined outcomes and the University's undergraduate Degree level Expectations (DLE's). The Review Team noted that the mission statements for the undergraduate and graduate programs are clearly stated and well-aligned with the University's mission and expectations within the discipline. The Department has made a determined effort to respond to the University's Academic and Strategic objectives and indicates that it will continue to do so ("programs are a good fit with the Advanced Systems and Technologies research priority in the Academic plan", "programs support the Growth and Capacity Development objective in the Strategic plan"). The Co-op option was identified as a "clear

strength of both undergraduate and graduate programs" and there is evidence of the consistent and supportive mentoring provided by faculty for students, including a departmental commitment to ensure that students have access to the courses they need to graduate.

The Review Team also expressed concern about the resources available to the Department, the availability of senior level and graduate courses and program options/requirements that stretch the Department's ability to function.

The Chair of the Department, in consultation with the Dean of Sciences and Environmental Studies, submitted a response to the Reviewer's Report (October 2014). Clarifications and corrections were presented followed by a response to each of the recommendations made by the Review Team.

A Final Assessment Report (FAR) has been prepared to provide a synthesis of the external evaluation and internal response to the recommendations. This report identifies the significant strengths of the programs, the opportunities for program improvement and enhancement, and sets out and prioritizes the recommendations that have been selected for implementation.

The Implementation Plan identifies who will be responsible for approving the recommendations set out in the FAR; who will be responsible for providing any resources made necessary by those recommendations; any changes in organization, policy or governance that will be necessary to meet the recommendations; who will be responsible for acting on those recommendations; and timelines for acting on and monitoring the implementation of those recommendations.

Programs covered by this cyclical review:

Undergraduate:

- Honours Bachelor of Science (Computer Science)
- Honours Bachelor of Science (Computer Science) with Bachelor of Education (concurrent)
- Bachelor of Science 4 yr (Computer Science) with Cooperative Education
- Bachelor of Science 4 yr (Computer Science)
- Bachelor of Science 3 yr (Computer Science)
- Bachelor of Science- 3 yr (Computer Science) with Bachelor of Education (concurrent)
- Computer Science Minor
- Options Science, Business and Hardware
- Specialization Game Programming

Graduate:

- Masters of Science (Computer Science) thesis or project option
- Masters of Science (Computer Science) with Cooperative Education thesis or project option

Implementation Plan (Part A): Departmental Responsibilities – Department of Computer Science

Recommendation	Proposed Follow-up	Responsibility*	Timeline
Ensure ongoing curriculum review by Graduate Studies committee and Graduate Coordinator	Explore recommendations made within the Reviewer Report; identify items that can be dealt with short- and long-term.	Graduate coordinator, Graduate Studies Committee	Sept 2016
Ensure ongoing curriculum review by Undergraduate Studies committee and Program Chair	Explore recommendations made within the Reviewer Report; identify items that can be dealt with short- and long-term.	Program Chair; Undergraduate Committee	Sept 2016
Explore transfer options with appropriate college diploma programs	Prepare application to ONCAT for funding to accomplish this goal.	Departmental delegates	January 2016
Foster better utilization of existing and evolving Library resources and services by students.	Explore options to include additional exposure to Library resources and services within both the undergraduate and graduate programs	Program Chair, Graduate Coordinator, Library resource professional	Sept 2016
Continue to promote and develop the Co-operative Education option	Explore recommendations made within the Reviewer Report; identify items that can be dealt with short- and long-term.	Program Chair, Graduate Coordinator, Co-operative Education Officer (SSC)	Sept 2016
Explore opportunities for student and community involvement in program development	Consider recommendations 16 and 20 from the Review Team; provide report for Departmental review.	Program Chair, members of the Department	January 2017
Explore formation of a student association	Meet with students to determine if this is an appropriate goal.	Program Chair or delegate(s)	January 2017

Recommendation	Proposed Follow-up	Responsibility*	Timeline
Develop a departmental quality plan	Consider departmental and faculty role in recruitment, retention, classes, etc.; be prepared to contribute as part of next academic plan cycle.	Program Chair, members of the Department	Sept 2017

Implementation Plan (Part B): Decanal & Administration Responsibilities

Recommendation	Proposed Follow-up	Responsibility*	Timeline
Consider hire of one full-time member of Faculty	Department to develop Strategic Hiring initiative proposal as part of regular budget cycle	Dean	Annual
Consider hire of 0.5 FTE technical staff	Department to develop Strategic Hiring initiative proposal as part of regular budget cycle	Dean	Annual

^{*}The Dean of the Faculty, in consultation with the Department Chair shall be responsible for monitoring the Implementation Plan. The details of progress made will be presented in the Deans' Annual Reports and filed in the Office of the Provost and Vice-President (Academic).