**CARLETON UNIVERSITY COMMITTEE ON
QUALITY ASSURANCE
Cyclical Review of the undergraduate program in Network Technology
Executive Summary and Final Assessment Report**

This Executive Summary and Final Assessment Report of the cyclical review of Carleton's undergraduate program in Network Technology is provided pursuant to the provincial Quality Assurance Framework and Carleton's Institutional Quality Assurance Process (IQAP).

EXECUTIVE SUMMARY

The Bachelor of Information Technology: Network Technology program resides in the School of Information Technology, a collaboration between the Faculty of Engineering at Carleton University and Algonquin College.

As a consequence of the review, the programs were categorised by the Carleton University Committee on Quality Assurance (CUCQA) as being of good quality. (Carleton's IQAP 7.2.12).

The External Reviewers' report offered a very positive assessment of the programs. Within the context of this positive assessment, the report nonetheless made a number of recommendations for the continuing enhancement of this program. These recommendations were productively addressed by the Director of the School of Information Technology and the Dean of the Faculty of Engineering in a response to the External Reviewers' report and Action Plan that was submitted to CUCQA on May 8, 2019.

Unit Response to External Reviewers' Report & Action Plan
Programs Being Reviewed: Network Technology
Approved by Dean: include title/date
March 1st, 2019
Note: This document is made available for public posting on the Vice- Provost's website.

Introduction & General Comments

Please include any general comments regarding the External Reviewers' Report.

The Schools were generally pleased with the thoroughness of the reviewer's report. The report has been discussed with faculty at both institutions, as well as the Chair of Information Technology and Communications SSM. We have formulated responses we believe will provide solutions to the issues addressed in the report. This document contains both a response to the External Reviewers' Report and an Action Plan (Section B) which have been created in consultation with the Dean(s).

For each recommendation, a category has been applied indicating one of the following responses:

Recommendations agreed to unconditionally;
Recommendations agreed to if resources permit;
Recommendations not agreed to.

Calendar Changes

If any of the action items you intend to implement will result in calendar changes, please describe what those changes will be. To submit a formal calendar change, please do so using the Courseleaf system.

Abbreviations:

- **Director of the Carleton School of Information Technology, D-CSIT**
- **Associate Director (Graduate) of the Carleton School of Information Technology, ADG-CSIT**
- **Joint Academic Committee (Faculty Board Equivalent), JAC**
- **Network Coordinator, NCOORD**
- **Chair, Information & Communications Technology – SSN (Algonquin), CICTS**

UNIT RESPONSE AND IMPLEMENTATION PLAN				
Programs Being Reviewed:				
External Reviewer Recommendation & Categorization	**Action Item**	**Owner**	**Timeline**	**Will the action described require calendar changes? (Y or N)**
1. **Program policy miscommunication.** There appears to be differing program policies between Carleton University and Algonquin College. For instance, the academic integrity policy of each institutions differ and the question of which policy to apply arise when an Algonquin College course is taught. Differing policies should all be addressed in advanced and communicated clearly to all faculty and students to alleviate potential disagreements. Carleton University's program coordinator should be required to attend Algonquin College program advisory committee (PAC) meetings. Carleton University faculty should also be strongly encouraged to attend these meetings.	*D-CSIT will utilize the JAC to determine implementation conflicts in current regulations (where Carleton regulations conflict directly with requirements at Algonquin) to determine any necessary updates to the policy.* *Policy conflicts will be clarified on a yearly basis at the JAC meetings; this allows conflicts to be discussed and verified* *Algonquin will invite the D-CSIT and NCOORD to the PAC meetings*	*D-CSIT* *D-CSIT* *CICTS*	*March – May 2019* *On Going* *Winter 2019, On Going*	*N* *N* *N*
2. **Programming stream.** The students mentioned that there was too much time in between programming courses. Reducing the amount of time between these courses could enhance the	*This change has already been implemented in the Calendar changes approved at the last senate meeting; programming courses now span all years and all terms.*	*D-CSIT*	*N/A*	*N*

smooth transitioning between courses and reduce the possibility of forgetting course materials.				
3. **Carleton University professors and TAs miscommunication (or lack of).** Some of the students have mentioned that TAs and course instructors do not always communicate in a consistent manner as they have noticed few discrepancies on labs, rubrics, etc.	*More TA Training will be implemented to bring TAs up to speed* *TA Tutors (Senior TA) will be used to train new TAs to improve consistency and improve expectation* *A TA Leader will be appointed (a permanent position) to help improve quality*	*D-CSIT*	*2019-2020 Academic Year, On Going*	*N*
4. **Teaching assistant (TA) selection.** Due to the lack of BIT-NET graduate level students, the selection of TAs appears to come from other master programs at times without proper qualifications. There should be a method to report when a TA does not follow the set guidelines. TAs should also receive mandatory training and have sufficient background in the courses before the course assignments.	*In addition to the items above; we shall also utilize, where, possible, 4th year - NET students as TAs for lower level classes*	*D-CSIT*	*2019-2020 Academic Year, On Going*	*N*
5. **Revitalize the program curriculum.** It was mentioned by students, Algonquin College PAC, and BIT-NET alumni that some new topics could be covered in more detail. This may require adding, merging or dropping existing courses. The students should also be taught software project management topics prior to taking senior design courses as agreed with Algonquin College PAC members and alumni. Another recommendation was to allow students to learn and practice their management and presentation skills in their existing communication skills course as well as in	*Changes to the curriculum to add new courses will be discussed.* *Items to be discussed:* *Dropping Desktop and Server Environments (merging with Linux networking)* *Adding Software Project Management as a single course*	*D-CSIT, in conjunction with the JAC*	*March – September 2019*	*Y, potentially*

their senior design courses. Refer to section 2 of this report for more details.	*Changing Communication Skills description to better fit student's requirements in the industry*			
6. **Increase industry involvement at Carleton University**. Algonquin College currently has excellent connections to industry while it appears that Carleton University has much fewer connections. Carleton University faculty mentioned that they would like to see more industry involvement in their courses. Industry involvement can include being a client in senior design project, giving ideas and financial and/or in-kind support throughout the senior design project, giving guest lectures in various courses in the program.	*Algonquin will invite the D-CSIT and NCOORD to the PAC meetings* *Instructors at Carleton, in coordination with D-CSIT and NCOORD will be encouraged to include industrial guest lectures during courses relevant to the course material*	*CICTS* *D-CSIT + NCOORD*	*Ongoing* *Ongoing, Term-by-Term*	*N* *N*
7. **Seek industrial testimonials for importance and marketing of the program**. Feedback from faculty meeting reflected that students do not always see the relevancy of some courses. It is suggested that Carleton University and Algonquin College invite their industry partners, PAC, and alumni to create short videos, audio recording, or written submission answering pre-determined questions about the importance of program courses. These testimonials could be shared with students at the beginning of a course or a stream and could also be used for marketing purposes and potentially increase enrollment and reduce attrition rates.	*Industry connections (specifically PAC members, and coop employers), and alumni will be asked to participate to record video testimonials specifically addressing the courses and course structure of the NET program*	*D-CSIT + NCOORD*	*Reviewed on a 2-year basis in order to remain relevant*	*N*

8. **Building a pathway to advanced graduate programs.** In order to increase the number of students interested in pursuing graduate programs, one suggestion is to have the research faculty present their ongoing research work to the students and provide faculty mentorship to those willing to conduct research in their respective research labs. Funding a conference travel for presentation of an accepted paper at a conference can be further incentive.	*CSIT will look at options to allow students to complete graduate programs part-time* *The AD-CSIT and NCOORD will organize presentations to introduce NET students to the potential for graduate studies*	*D-CSIT + ADG-CSIT* *ADG-CSIT + NCOORD*	*Winter 2019, Ongoing*	*N*
9. **Provide an Exit / Entrance Opportunity for college students**. The enrollment of the BIT-NET program can be potentially increased by the creation of more clear entrance pathway to transfer to Algonquin College's 2-year Computer System Technician program for those students who are unable or not willing to complete the four-year program. Another suggestion is to seek articulation agreements with other 3-year diploma college programs. It is suggested that exit / entrance opportunities be investigated.	*Current students will be surveyed to determine interest in entry/exit pathways* *An entry pathway (bridging) for students coming from the CST program will be developed (with enough interest) that agrees to a specific number of credits and clarity over the course structure* *An exit pathway will be developed for students who are struggling and wish to exit; with clear criteria for exit recommendations*	*D-CSIT + CICTS*	*Winter 2019*	*Y, potentially*
10. **Provide more elective options for students.** Currently, the choice of technical elective courses to the students is very limited and provide very little long-term benefits the students. The committee is aware that scheduling might be a problem when it comes to the implementation. However, through merging certain courses or course contents, or exploring the evening class options, it may be possible to make such arrangements.	*We shall investigate the options to provide elective courses; this will be done by determining the courses that are optional and courses that can replace those (as electives).* *Due to the smaller number of NET students (due to the program configuration) to obtain enough students, course configurations would be setup to allow students from other programs to also take these courses.*	*D-CSIT + NCOORD*	*March 2019 – September 2019*	*Y*