

**FINAL ASSESSMENT REPORT**  
**Institutional Quality Assurance Program (IQAP) Review**  
**School of Engineering Technology**

**Bachelor of Technology Four-Year Degree Programs**

<b>DCP Program Stream</b>	<b>Date of Review</b>
Automotive and Vehicle Technology (AVT)	April 22 – 23, 2014
Biotechnology (BIO)	April 29 – 30, 2014
Process Automation Technology (PAT)	June 2 - 3, 2014
Management (GEN TECH)	February 24 - 25, 2014

*In accordance with the University Institutional Quality Assurance Process (IQAP), this final assessment report provides a synthesis of the external evaluation and the internal response and assessments of the four-year degree programs delivered by the **School of Engineering Technology**. This report identifies the significant strengths of the programs, together with opportunities for program improvement and enhancement, and it sets out and prioritizes the recommendations that have been selected for implementation.*

*The report includes an Implementation Plan that identifies who will be responsible for approving the recommendations set out in the Final Assessment Report; who will be responsible for providing any resources entailed by those recommendations; any changes in organization, policy or governance that will be necessary to meet the recommendations and who will be responsible for acting on those recommendations; and timelines for acting on and monitoring the implementation of those recommendations.*

**Executive Summary of the Cyclical Program Review of the Programs in the  
School of Engineering Technology**

In accordance with the Institutional Quality Assurance Process (IQAP), the School of Engineering Technology submitted four separate self-studies in January - March 2014 to the Associate Vice-President (Faculty) to initiate the cyclical program review of its four-year degree undergraduate programs. The approved self-studies presented program descriptions, learning outcomes, and analyses of data provided by the Office of Institutional Research and Analysis. Appendices to the self-study contained all course outlines associated with the program and the CVs for each full-time member in the School.

Two arm's length external reviewers and one internal reviewer for each program were endorsed by the Dean of the Faculty of Engineering, and selected by the Associate Vice-President (Faculty). The review teams reviewed the self-study documentation and then conducted site visits to McMaster University between February – June, 2014. The visits included interviews with the Provost and Vice-President (Academic); Associate Vice-President (Faculty), Dean of the Faculty of Engineering, Director of the School of Engineering Technology, chairs of each of the program streams and meetings with groups of current and former undergraduate students, full-time faculty and support staff. The reviewers also had the opportunity to tour the School of Engineering Technology.

The Director of the School of Engineering Technology and the Program Chairs submitted a joint response to the Reviewers' Report in October 2014. The Associate Dean Academic submitted a response on behalf of the Faculty of Engineering in December 2014. Specific recommendations were discussed and clarifications and corrections were presented. Follow-up actions and timelines were included. McMaster's Quality Assurance Committee (QAC) reviewed the above documentation and the committee determined that the programs are functioning well and that there are no significant academic issues that are not being addressed. The QAC recommends that the program should follow the regular course of action with an 18-month follow up report and a subsequent full external cyclical review to be conducted no later than 8 years after the start of the last review. The Final Assessment Report was prepared by the QAC to be submitted to Undergraduate Council and Senate (February 2014).

In their reports, the Review Teams provided feedback that describes how the four-year programs in the School of Engineering Technology meet the Institutional Quality Assurance Process (IQAP) evaluation criteria and are consistent with the University's mission and academic priorities. Executive summaries for each of the stream reviews are below.

**Four-Year Degree Stream Executive Summary**

<p>Automotive &amp; Vehicle Technology (AVT)</p>	<p>Based on information gained from the on-site review, the self-study, consultation with members of the program and the University, independent assessments and all material submitted as part of the program review, the review team is convinced that the AVT B.Tech program structure is good, has notably strong and creative attributes, and does not seem to have a lot of issues. Interviewed students did appreciate the program curriculum. The visiting team has identified possibilities for improvement implementations related to several areas of the program. Of these, the highest priority should be given to:</p> <ul style="list-style-type: none"> <li>• Reducing the number of CLAs and sessional instructors.</li> <li>• Improving the CO-OP system by making it more flexible.</li> <li>• Formally introducing the design process, hand sketching, tolerancing and GDT, into the AVT curriculum.</li> <li>• Laboratory enhancements by including creative open-ended technical challenges.</li> <li>• Reduction or combining of GEN TECH courses.</li> <li>• Some room for electives in both the AVT and GEN TECH areas should be created when the program is fully resourced and at steady state.</li> </ul>
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<p>Biotechnology (BIO)</p>	<p>In the relatively short period since its start, the Biotechnology Program has developed into a unique, effective and sound academic program. The latest curriculum is largely appropriate to the field of biotechnology and the developmental changes are all well substantiated. The Program strengths identified by the spectrum of students interviewed are strongly endorsed by the reviewers. It is also noted that student assessment of their professors indicates a strong appreciation of their contributions to the success of the Program. The program is intensive but endorsed by the review. The Co-op experience clearly is a challenge for second year students but is of significant benefit to the students and demonstrates the value of the program and its graduates to potential employers.</p>
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The collaboration between McMaster University and Mohawk College, together with the sharing of resources and personnel has to be positively acknowledged. It is a successful model that sets a valuable target for other University/College initiatives and clearly will be recognized by funding agencies as meeting their objectives in these times of limited resources for post-secondary education in Canada. In general, the feedback from students and faculty is that it has been an effective partnership. The reviewers concur with the current view that certification as professional engineers or biologists should be a continuing exercise but at this time the presence of any constraints to the still being fine-tuned program should be avoided.

The teaching loads of faculty in the program are high by Canadian University norms in principally undergraduate programs but fit the pattern currently existing in Canadian Technical Colleges. We have identified that there are faculty in the Program with significant research background and interest. We believe that applied research with biotechnology companies in Ontario would be of benefit also for students and potential research faculty in the Program. This commitment would not only raise the profile of the Program with the expanding industry with research needs but also comply with the McMaster University Mission Statement. Possible funding sources for University/College/Industry collaborative research are identified.

The current system of governance seems appropriate to the collaborative nature of the program and the McMaster administrative structure. Further integration with industry is a major issue for this program and any measures that contribute to this endeavor should be supported.

#### Process Automation Technology (PAT)

The PAT B.Tech program addresses a niche area in the market. There is good demand from applicants, there are employment opportunities for graduates, and the program is complementary to, rather than competitive with, other engineering programs offered by McMaster University. The curriculum is well-balanced between a substantial laboratory component, technical courses, and general technology courses. The program has also undergone adjustment following monitoring, self-assessment and review. The program has had consistently strong enrollment. The overall standard is solid and retention is good. The personnel interviewed were enthusiastic, positive, and committed, and the general morale appeared to be high. Some areas of concern to be addressed were highlighted including stability of teaching staff, emphasizing communication skills throughout, the effectiveness of co-op program placement and updating Laboratory equipment and software used in teaching.

The program currently is not an Honours program. Should this designation be desired in the future, then more emphasis should be placed on design and synthesis (not just analysis) throughout the curriculum and a final design thesis resulting from a major project course should be much more enhanced.

Finally, the PAT B.Tech program is not accredited by Professional Engineers Ontario. This fine as it is part of the differentiation between the B.Tech programs and other regular engineering programs, which defines its special niche in the market. It would be sufficient to define, for those few who are interested, a clear path to Professional Engineering certification after

graduation by completing certain courses to be specified.

General Technology      The assessment of the Bachelor of Technology (General Technology – 4 Year Program) by the external review team was prepared on the basis of information gathered from a two-day onsite visit, document review, as well as meetings with a range of members representing faculty, administration, staff, current students, and alumni. The external reviewers' report addresses the 13 areas of program review outlined in the Guidelines for the Review Team and includes assessments, observations, and comments on the program as well as recommendations and suggestions for the program's consideration.

In summary, the strengths of this program include its alignment and support of the University's mission, an interdisciplinary focus on engineering as well as management knowledge that provides students with a unique capacity to meet industry and organizational needs, a "3D" focus that equips students with theoretical knowledge and hands-on experience through co-operative education and laboratory work, strong enrolment growth, a team of dedicated full-time faculty instructors with strong industry experience, small class sizes, access to leading edge laboratory facilities and institutional library facilities, proactive curriculum changes resulting in content more clearly aligned with management trends and issues, active engagement of community partners in Advisory Committees for the various components of the program, the emerging awareness of the program both by students and industry employers, and a strong model of the ways in which to govern, structure, and operationalize a university/college articulation agreement.

Concerns and challenges outlined in the report include the current admission entrance averages for the program, the significant number of classes taught by sessional instructors, the growing percentage of sections taught by full-time faculty on an overload basis, the lack of engagement in the co-op process by a number of students, the challenge of having students recognize earlier in the program the importance of the management and communication courses for their co-op and long-term career success, a lack of clarity regarding career pathways – particularly for students who want to pursue a P.Eng. designation, the desire by some students to have the program branded as a McMaster program rather than a McMaster-Mohawk program, and some confusion or at least a lack of clarity related to the brand messaging regarding the B.Tech brand noted by students during employer interviews.

Suggestions and recommendations provided by the reviewers include points related to the review of the existing Memorandum of Understanding with Mohawk College, admissions, branding and communications strategies, course deliverables, and enhancing stakeholder engagement including alumni and the PEO.

The following program strengths and weaknesses were noted:

**Strengths**

- AVT: The program is making effective use of its physical and financial resources in offering a high quality curriculum with strong emphasis on experiential learning. Its lab facilities are good.
- BIO: This is a unique, effective, and sound academic program, with curriculum that is appropriate to its field. Students rate the teaching and performance of their professors highly. The labs are well designed and equipped. Cooperation between McMaster and Mohawk has been effective.
- PAT: The program is of good quality, having achieved a good balance between theory and practice. The curriculum provides good coverage, from general fundamentals to relevant specialized topics; it reflects the current state of the field. The program is well served by its leadership.
- GEN TECH: The program appears viable and relevant, given its healthy admission numbers. Graduates are well-equipped with theoretical knowledge, critical thinking capacity, and hands on experience in both management and technology. They are well positioned as attractive recruits with strong potential for long-term career success.

**Weaknesses**

The major concern raised by the reviewers of these programs is common to all of them: excessive dependence on Contractually Limited Appointments and on sessional lecturers. Responses to the reviews suggest that this concern is being addressed, though the situation certainly warrants careful monitoring. Dissatisfaction with the functioning of co-op requirements was also commonly expressed; responses indicate that a number of steps have been taken to improve the co-op experience.

The Dean of the Faculty of Engineering, in consultation with the Director of the School of Engineering Technology and the chairs of the programs shall be responsible for monitoring the recommendations implementation plan. The details of the progress made will be presented in the 18-month Follow Up Report and filed in the Office of the Associate Vice-President (Faculty).

**Summary of the Reviewers’ Recommendations with the School’s and the Faculty’s Responses**

**Recommendations**

Four Year Degree Stream	Review Team Recommendations	Program Chair and Faculty’s Response	Timeline
AVT	<p>Recommendations to adjust the wording of 6 of our 9 Program Learning Outcomes (PLOs) were made.</p> <p>Suggestions were made to substitute “engineering knowledge” with “technical competence”, to substitute “engineering fundamentals” with “specialized knowledge of engineering technology fundamentals”, and to substitute</p>	<p>We are not in support of these changes as they decrease the expected level of student performance</p> <p>Courses taught in the BTech Program require students to learn engineering knowledge and engineering fundamentals.</p> <p>The Faculty noted that it is entirely appropriate for a B.Tech program to</p>	

	<p>“engineering tools” with “use of technical tools”</p> <p>Another suggestion was to replace “solving complex engineering problems” with “solving engineering technology problems”</p> <p>In addition, the review team suggests downgrading the level of complexity suggested by the PLOs by eliminating the term “complex” in all PLOs or substituting “modern engineering tools to a range of engineering activities from simple to complex” with “modern technical simple to moderately complex tools”</p>	<p>each aspects of Engineering. Learning outcomes associate with these aspects use terms such as Engineering Knowledge.</p> <p>B.Tech. offers some courses that are cross-listed with engineering departments and several B.Tech courses use the same textbook as the engineering equivalent courses. Our students are required to solve similar problems to B.Eng. students. The review team did not review our course outlines or look closely at assignments, tests, and exams and was not in a position to properly assess the complexity of problems solved by students in our program.</p>	
	<p>Reference should not be made to the CEAB, since the B.Tech program is not accredited</p> <p>GEN TECH instructors for upper year technical courses (e.g. Quality Control and Assurance, Engineering Economics, etc.) should be taught by Professional Engineers</p> <p>Experiential learning components need to be adjusted to include more hand sketching, design process, tolerances, and GDT</p> <p>The name of many of the courses</p>	<p>We make use of CEAB guidelines (published publicly on their website) so that we are closely aligned to PEO requirements, making the pathway to P.Eng. licensing as smooth as possible.</p> <p>We did not mean to imply in any way that we are affiliated with their organization.</p> <p>The Faculty supports the objectives of the program in this regard and will work with the program to ensure no misunderstanding regarding the accreditation status of the program.</p> <p>We have taken this into consideration in the past and will continue to hire instructor with academic qualifications and industry experience that best supports course outcomes</p> <p>The formal design process will be taught during the Fall 2014 semester in the Advance CAD course and in the Technical Report courses</p>	

	<p>needs to change to better describe what is being taught More flexible lab experiments should be incorporated to foster creativity and expose students to more challenging problems include material on tolerances and GDT, rather than strictly CAD courses to ensure that we are not simply training technologists Incorporate mandatory tutorials and reduce number of tests in Math courses</p> <p>GEN TECH courses should be tailored to each stream</p>	<p>These suggestions will be incorporated in our next curriculum changes for 2015-2016 This will be implemented in upper year labs where possible</p> <p>Material tolerances and GDT has already been implemented in the Fall 2014 semester in a CAD course and in a manufacturing course. The CAD training our students receive is part of what differentiates them from Engineers and is highly valued by employers – many student secure co-ops because of it.</p> <p>Where possible, GEN TECH courses provide students with opportunities to choose project topics related to their interests (Usually within their field/program stream)</p>	Update at 18 month report
	If at all possible, faculty should have their P.Eng. license	<p>This is something that is being strongly encouraged at the faculty and departmental level. Funds have been assigned to cover the cost of application and registration fees for B.Tech full-time faculty</p> <p>The Faculty supports the program in considering the Licensure status in a balanced approach to hiring.</p>	Update at 18-month follow up
BIO	There are clearly some faculty and students who have demonstrated ability to make significant contributions in applied research with industry which would strengthen the program's integration with industry	We strongly encourage our interested faculty to seek collaborative grants with industry for applied & industrial research and to involve co-op and technical report students	
	High school students should be required to have Biology 12U for admission to the program	This is now a possibility, since our intake is moving from a common first year to stream-specific application process. We will attempt to add Biology 12U to the Academic Calendar changes for the 2015-16 year	Update at 18-month follow up

	<p>Suggestions for improvement could include expanding the scope of microbial potential into areas like bioremediation, biological pest control, bio-mining, environmental waste spillage clean up and new bio products.</p> <p>The latest changes are appropriate to the field and justified by student, faculty and industry feedback. The program is to be applauded for the speed with which the changes were made.</p> <p>Use of AV equipment labs is ideal from pedagogical standpoint, creating maximum levels of interaction</p>	<p>We agree and many of these topics are already being included in level 3 and 4 such as Biotechnology II (3BO3), Biotechnology III (4TB3) and Technical Reports I and II (4TR1, 4TR3).</p>	
	<p>Lab component should be included in level 1 Biology course</p> <p>Increased emphasis on developing communication skills would be valuable</p> <p>Ensure that new lab course laboratories (Food Microbiology, for instance) have appropriate technical support</p>	<p>This has been added, effective Winter 2015</p> <p>Revisions to first year communications courses have already occurred and student skills are being assessed to determine if improvement has been made</p> <p>We are hiring more students in the Fall to assist with lab support and will consider hiring an addition Lab Technician if needed</p>	
	<p>Donor recognition for contributions of equipment and software should be in place</p> <p>Could be beneficial to create a custom reading library with some specialized academic and trade publications specific to biotechnology to supplement library resources and encourages students to stay abreast of hot topics</p>	<p>We have an industry partner's page online as part of our website. We will ensure that all Biotechnology donors are listed appropriately</p> <p>We agree with this suggestion and will look into how to take action on this space wise</p>	<p>Update at 18-month follow up</p>
	<p>Student surveys suggest that students are frustrated with the co-op search process. It was suggested to create a one-page skills sheet that students can use in their job search</p>	<p>We have hired a graphic designer to put together a package of marketing materials that students can use in their job hunt – this will include stream specific flyers with skill-sets listed.</p>	



	<p>Survey feedback indicates that response times from faculty are not always satisfactory. It was recommended to implement the Teaching Portfolio technique for faculty</p>	<p>We agree with this suggestion and will be looking into ways to integrate/encourage Teaching Portfolios by faculty members</p>	<p>Update at 18-month follow up</p>
	<p>Faculty should receive course relief to pursue applied research – ideally with industry partners, which would allow for student experience in these initiatives. This could be supported by government funding.</p>	<p>We will encourage BIO faculty to build relationships with industry and pursue grants to support applied research where possible</p>	<p>Update at 18-month follow up</p>
	<p>Certification of graduates as professional engineers or as professional biologists (if this designation moves to Ontario) could be beneficial to the program and its students</p> <p>The participation of students and faculty in conferences, workshops etc. are opportunities to raise the profile of both the program and its students</p> <p>Industry events and special guest lectures should continue</p> <p>Instructors should be provided with opportunities to participate in training</p> <p>Integration with other departments should be approached with caution so as not to disrupt the small, exclusive learning environment that students seem to enjoy in B.Tech</p>	<p>Major curriculum modifications have already taken place to better align with PEO requirements for Biochemical and Biomedical Engineering licensing. This will continue to be under consideration moving forward.</p> <p>This is happening but to a limited degree. A professional development account for this purpose will be included in the budget for the 2015-16 fiscal year.</p> <p>We agree and have funds set aside for this purpose</p> <p>These are available through MIETL. We will ensure that opportunities are communicated to instructors</p> <p>We may consider collaborating with Chemical Engineering in the form of cross-listed undergraduate or graduate courses (should a Master's level program be created), and will keep this caution in mind.</p>	<p>Update at 18-month follow up</p>
PAT	<p>12% of admitted students are transfers from the B.Eng program</p> <p>The percentage of women in the</p>	<p>20 seats out of 240 are currently reserved for this purpose for all three 4 year programs</p> <p>Agreed for PAT and AVT – initiatives are underway to address this within</p>	

	program is very low	the faculty as a whole	
	<p>Students expressed interest in splitting the course on automation and robotics into 2 to allow more in-depth knowledge and training in robotics programming</p> <p>Students would like the course on systems design and specifications earlier in the program of study</p> <p>Report writing and communication learning outcomes need more attention</p>	<p>Aware of the suggestion but find it difficult to identify which course to “sacrifice” to allow for this additional course. This will be addressed during the Summer 2015.</p> <p>The Faculty supports the program in resisting curriculum overload but asks that they review this issue on an ongoing basis as part of the annual curriculum review.</p> <p>This will be discussed in Summer 2015 for the 2016-17 curriculum</p> <p>This has probably improved with the redesign of the 1<sup>st</sup> year communication courses that were introduced in 2013-14. A discussion with all instructors will be initiated to emphasize the need for attention and feedback on the communication aspects of submitted reports</p>	Update at 18-month follow up
	<p>Examining a sample of final exams revealed lack of synthesis type problems and open-ended questions</p> <p>Core faculty are on limited (3-4 years) contract renewable only once and some are approaching this limit</p>	<p>Valuable observation. It will be shared with the faculty and there will be discussion on the inclusion of more synthesis-type problems in tests.</p> <p>The School of Engineering Technology has had a number of teaching track positions approved to address this issue</p>	Update at 18-month follow up
	<p>The quality of equipment in some Mohawk labs is not up to standards; many pieces of equipment are covered in dust and several are not operational which affects the conduct of the Labs and are not conducive to an effective learning environment. Improve equipment cleanliness and appearance in these Labs</p> <p>More electrical schematic content should be included in the CAD course</p>	<p>This has been largely addressed with the move to ETB/B111 in Summer 2014</p> <p>This is included in the course description, but has been overlooked for the sake of more 3D</p>	Update at 18-month follow up

	<p>Update and renew instruments used in control theory and application courses (some PC boards do not work, and PLCs and micro-controllers are not state-of-the-art, etc)  The general courses offered early in the program are less appreciated by the students.  Assign effective instructors to the GenTech courses to make them more relevant to the material to follow in subsequent years and increase their value to the students  Emphasize developing communication skills in every course throughout the curriculum.  Course titled Manufacturing systems should have much enhanced systems content (or be renamed). As it stands it is more about manufacturing technologies, not systems – the systems aspects are not addressed. The used text book also is about manufacturing technology  Pay attention to the pedagogy of software being taught and ensure that the software is consistent with industry use (e.g. OPC software, robot programming and others)</p>	<p>modeling practice. Will be assessed in Summer 2015</p> <p>The GenTech curriculum has recently been redesigned to address relevance issues and more qualified instructors have been appointed</p> <p>Agree with the idea to emphasize communication throughout technical and management courses</p> <p>Will be discussed with instructor and re-examined in Summer 2015 for 2016 – 2017 curriculum</p> <p>With the exception of the robot programming software (MELFA), all software used is the industry standard. We are forced to use MELFA by the existing robotics equipment</p>	<p>Update at 18 month report</p>
	<p>Increase awareness of industry, as potential employers and hosts of co-op students of the B.Tech. program through more promotion, participation in fairs, etc.</p> <p>Increase industrial tours to enhance students’ awareness of the practical applications of what they study. Introduce an “engineering tour report” in the</p>	<p>Ongoing initiative to increase industry awareness will continue</p> <p>We have done these in the past and will continue to look for opportunities to do so moving forward</p>	<p>Update at 18-month follow up</p>

	<p>course content as a means of increasing the value gained from the visit and also enhancing the communication skills training</p> <p>Enhance faculty career path and stability. Increase faculty and instructors' participation in leadership development programs, mentoring activities, and professional and career development, including offering some paid time-off or course relief to engage in these activities</p>	<p>Already in progress (e.g MIETL research fellows program). More action is needed. Should be discussed with other Program Chairs and Director</p>	
GEN TECH	<p>Increased industry collaboration should be encouraged in the form of guest lectures and involvement in student project</p>	<p>This has already been identified as a priority and has funds devoted to support it (via the Woodbridge Lectureship)</p>	
	<p>The discrepancy between B.Eng. and B.Tech. admission requirements is creating a divide and leading to the perception that B.Tech is an inferior program</p>	<p>We intend to continue to lessen the gap between the entrance averages as much as possible over the coming years</p> <p>The Faculty encourages programs to seek students with strong academic records; however, it does not believe it is essential for the B.Tech and B.Eng. to have similar entry requirements.</p>	<p>Update at 18-month follow up</p>
	<p>Students felt that communications courses were seen as "filler". Second year students question the contribution to their education of these communication courses</p> <p>Consistent reminders of the 'What's in it for me?' factor may help students connect academic content to workplace practices</p>	<p>These comments refer to the course as it existed prior to hiring a full-time faculty member to re-design the curriculum and manage instruction. Recent offerings of the course have not produced similar sentiments amongst students</p> <p>We agree and will continue to look for ways to actualize this</p>	<p>Update at 18-month follow up</p>

	<p>Students felt that lecture should be shortened and tutorials enhanced</p> <p>Fourth year students expressed the wish to have more case studies in the curriculum</p> <p>Recommendation to augment current assessment measures with AOL (Assurance of Learning) testing similar to what is required of AACSB qualification through external testing</p> <p>It is suggested that sessional instructors have an assigned mentor or be asked to sit in on classes conducted by those with exceptional teaching scores</p>	<p>Computer labs were introduced in the second half of the 1<sup>st</sup> year communications course in Winter 2014 and will become a component in both parts of Fall 2014. As well, computer labs were introduced in the Project Management course as of Fall 2014.</p> <p>Cases are part of the active learning activities and exercises in many courses; however, based on feedback from students we have moved away from longer case analysis requiring advanced preparation out of class</p> <p>Currently there is no AOL outcome based assessment testing designed for hybrid technology management programs available. Agencies that offer these services are focused on measuring traditional business school curriculum only</p> <p>This recommendation has already been considered; however, logistical challenges have made it difficult to implement</p>	
	<p>Improved communication with sessional instructors is essential</p> <p>A Writing Centre on campus (especially ESL) students whose communication skills are weak would be helpful</p>	<p>We agree with this recommendation</p> <p>We are internally developing a drop in centre for students for help in writing and communication</p>	<p>Follow up at 18-month report</p>
	<p>Graduates stated they would have liked more training in public speaking</p>	<p>Currently, group presentations are used in both first year communications courses. Could explore opportunities for extracurricular activities for public speaking development (i.e. Toastmaster type club or a competition of sort)</p>	
	<p>Better tracking and connection with alumni</p>	<p>Our Recruiting and Promotion Coordinator carefully tracks alumni through LinkedIn and also</p>	

	The timing of co-op placements may need to be reviewed	<p>periodically reaches out through email</p> <p>An alumni event/reunion could be very beneficial for re-establishing connections with former students</p> <p>This was a workshop topic at our recent departmental retreat and the outcome was to leave the structure of the program as is</p>	
Common Feedback across all programs	Student opinions of the GEN TECH courses might be increased if formal recognition were feasible	All student now receive a Business Management Certificate from Mohawk College at graduation. In addition, the Management curriculum was accredited in September 2014 by the Canadian Institute of Management. This accreditation recognizes the academic requirements for the Certified in Management (C.I.M.) and Professional Manager (P.Mgr.) designations for all 4 year program graduates. The graduates will also need to demonstrate the appropriate level of managerial experience and submit the appropriate dossiers to the Canadian Institute of Management National Office for assessment.	
	Improved services for students in their co-op and career related activities is needed, along with a reassessment of the current co-op program	<p>We agree and are working towards improving the number of job postings and preparedness of our students (for example creating marketing materials for students to bring to interviews)</p> <p>We are establishing a central “drop-in centre” that can be utilized by ECCS to make better connections with students</p> <p>A student mentorship program is being developed which would involve upper year students acting in an advisory/counseling capacity to</p>	Update at 18-month follow up

		<p>students who are just beginning their job search</p> <p>We have hired a graphic design firm to create marketing materials to aid students in representing themselves, their skill sets and the program</p>	
	<p>Faculty continuity is a major issue that must be resolved</p>	<p>4 new faculty members have been hired and one Mohawk faculty has been taken on full-time as of Fall 2014</p> <p>A number of teaching track positions have been established for the School of Engineering Technology. Two positions are currently posted and hiring for these positions will continue on an ongoing basis over a number of years</p>	
	<p>The BIO team noted that in light of the 2012 instructor survey feedback indicating that faculty would like more involvement in program decisions and direction, it might be worthwhile to include more faculty on the Program Advisory Committee</p> <p>The GEN TECH team felt that an Industry Advisory Board (separate from the Program Advisory Committee) might help the School with continuous improvement, feedback, assistance in branding and promotion, etc.</p>	<p>The Faculty believes that the governance is more than adequate but will work with the Director, Chairs and Mohawk College partners to develop a more robust process for obtaining feedback from stakeholders.</p>	

### Quality Assurance Committee Recommendation

McMaster's Quality Assurance Committee (QAC) reviewed the above documentation and the committee determined that the programs are functioning well and that there are no significant academic issues that are not being addressed. The QAC recommends that the program should follow the regular course of action with an 18-month follow up report and a subsequent full external cyclical review to be conducted no later than 8 years after the start of the last review

