

4-YEAR POST IQAP FOLLOW-UP REPORT

PROGRAM OVERVIEW

PROGRAM IQAP REVIEW DATE PREPARED BY

Computer Science and Atts Science Mathematics, undergraduate Dean of Arts Science

PROGRESS OF PPC RECOMMENDATIONS

RECOMMENDATION	% COMPLETE	RESPONSIBLE MEMBER/UNIT	EXPECTED COMPLETION
The Department should explore the possibility of using a different programming language in first year Computer Science courses, and present the findings of that analysis to Dean for further action if warranted.	100	Department	Completed
The department should ensure that the Computer Science curriculum be reviewed to ensure that it meets ACM/IEEE-CS guidelines.	100	Department	Completed
The issue of "project and work experience" is an issue much broader than Mathematics and Computer Science. The Faculty of Arts and Science has developed a mechanism to incorporate this in many of its programs. PPC recommends that the Department investigate how to integrate project and work experience into the curriculum of both Mathematics and Computer Science.	100	Department	Completed
PPC recommends that the		Dean	

Dean and the Department Chair meet with the Dean of Education to ensure that the curriculum continues to meet the needs of Education Faculty.

SUMMARY OF PROGRESS TO DATE

Recommendation: The Department should explore the possibility of using a different programming language in first year Computer Science courses, and present the findings of that analysis to Dean for further action if warranted.

Responsible: Department. **Projected Date:** December 2016.

Response: The department discussed the recommendation, and its possible implication to the structure and delivery of the programming courses in several meetings in 2016. It was decided that the first year programming course COMP 1557 Introduction to Computer Science will continue to be taught using C++. The department is capable of using another language as introductory programming language, but at this time deems that the disadvantages of such a change outweigh the advantages. The more important is to teach students how to design a process to solve a problem. A language is only a tool to convey their ideas.

Recommendation: The department should ensure that the Computer Science curriculum be reviewed to ensure that it meets ACM/IEEE-CS guidelines.

Responsible: Department. **Projected Date:** May 2017.

Response: The department is reviewing its curricula on an ongoing basis. Currently, the undergraduate curriculum in Computer Science conforms to the ACM/IEEE-CS guidelines.

Recommendation: The issue of "project and work experience" is an issue much broader than Mathematics and Computer Science. The Faculty of Arts and Science has developed a mechanism to incorporate this in many of its programs. PPC recommends that the Department investigate how to integrate project and work experience into the curriculum of both Mathematics and Computer Science.

Responsible: Department. **Projected Date:** May 2017.

Response: In addition to the opportunities available to students at Faculty level, the department regularly offers to senior year and honours students a variety of courses that are project-based and involve work, under the supervision of a faculty member, on theoretical and practical topics of current significance aligned with the departmental research strengths in Topology, Applied Mathematics, Computational Physics, Robotics, Collaborative Systems and Graphics. Further, many of our students are involved in Math Circles, Electronics Labs, Robotics club and various mathematics and programming competitions. While these are extra-curricular opportunities, they enhance students' learning experience and professional development

Recommendation: PPC recommends that the Dean and the Department Chair meet with the Dean of Education to ensure that the curriculum continues to meet the needs of Education Faculty.

Responsible: Dean.

Projected Date: December 2016.

Response:

LIST OF ACTION ITEMS LEADING UP TO NEXT REVIEW

ITEM RESPONSIBLE MEMBER/UNIT PROJECTED COMPLETION

CONCLUSIONS/RECOMMENDATIONS/NEXT STEPS

The department is developing Minor in Physics with a projected start date of Fall 2018 and undergraduate program in Data Science with a projected start date of Fall 2019.