

Information Technology (ITEC) – undergraduate: BA, BAS; graduate: Master of Information Systems and Technology, Faculty of Liberal Arts and Professional Studies

Cyclical Program Review – 2005 - 2013

Final Assessment Report and Implementation Plan

Reported to Joint-Committee on Quality Assurance: April 28, 2017

Program Description

At the undergraduate level Information Technology (ITEC) is offered through the BA program in the Faculty of Liberal Arts and Professional Studies, and as a stream in the Bachelor of Administrative Studies (BAS). The BA options include specialized honours, honours, double major, minor and a 90 credit degree option. An undergraduate certificate in Information Technology Auditing and Assurance is also available as a concurrent or standalone option.

In 2010 the Masters in Information Systems and Technology (MAIST) admitted its first students.

Program	Accepts 2014	Enrolment FTES 2014	Degrees Awarded 2014
BA	223	457	48 Hons; 55 90 credit; 4 certificates
MAIST	13	17	16

Reviewers appointed by the Vice-Provost Academic:

Reda Alhadj, Professor, Department of Computer Science, University of Calgary
 Liwen Vaughan, Professor, Faculty of Information and Media Studies, University of Western Ontario

Prof. Jianhong Wu of Department of Mathematics, and Statistics, York University (withdrew from the Review Committee prior to submission of the report)

Documentation Provided to the External Reviewers

Prior to the site visit, the external reviewers are provided with the following:

- Dean’s /Principal’s Agenda of Concerns
- Department/Program Omnibus Statement (where applicable)
- Program Self-Study Brief, which includes program structure, curriculum and learning outcomes, program reflection, enrolment and retention data, resources, student input and quality enhancement opportunities



- Faculty CVs
- University, Faculty and Program planning documents

Site Visit: December 2 and 3, 2015

Outcome: The Joint-Committee on Quality Assurance concluded that the Decanal response adequately addressed the review recommendations. The Follow-up Report, due in November 2018, will report on progress and/or completion of the plan's priorities.

Program Strengths

The External Reviewers' Report notes that "ITEC positions itself as a cross between computer science and business studies. We believe that the ITEC curriculum overall achieves this goal".

The current structure of the graduate program very appropriate in offering three options for the Master's program; namely course based, project based, and thesis based. The expectations for each option, the number of courses, and the time needed to complete are all appropriate.

Reviewer's Recommendations from the report of January 2016:

The External Reviewers stated, "...the existing graduate and undergraduate curricula need further improvement to reflect the current state of the art in the disciplines covered and to keep the students up to the level expected of IT graduates in industry and academia. Courses in emerging topics should be integrated into the curricula, including big data analytics, mobile app development, and cloud computing". They also indicated that improvements were need on the business studies side of the curricula.

The resulting recommendation is that the Department should establish a curriculum committee to review the curriculum with attention to theory and practice and with a view to establish a more advanced curricula that meets both the requirements of international organizations related to the field, such as ACM, and the expectations of industry.

At the graduate level there is a need to offer more graduate courses in more current topics. This would benefit thesis-based students who wish to carry out advanced research projects and prepare course-based students to take more competitive positions in industry. The reviewers emphasized the need to have more faculty members who are active in research in order to attract more students and motivate them to excel.

The reviewers heard that the same course may be offered differently by different instructors. It is important to require reasonable adherence to the approved course objectives and they emphasized the need to avoid deviations from course objectives. In addition they heard from students that programming courses sometimes required essay type work instead of programming. This does not comply with the usual practice in other similar programs.

The reviewers made a number of observations and suggestions about how to improve the experience of students. These included areas of student support, recruitment, internship, computer lab equipment and student space.

1. Faculty members should focus their attention on the most current content for courses and ensure adherence to course outlines to avoid duplication.
2. There should be more interaction between faculty members to enable to above recommendations.
3. A further full review should be undertaken when adequate information has been collected and collated and a well-organized site visit can be facilitated.

Dean’s Implementation Plan

The Dean’s Implementation Plan states, “The Dean’s Office is very encouraged to see how seriously the ITEC program has taken the issues raised throughout the CPR process, and how it has thoughtfully responded to them with a constructive and forward-looking eye. This experience is indicative of the value of the CPR and Quality Assurance process, if colleagues engage with it substantively”.

The Plan generally focuses on the undergraduate program, particularly around curriculum and the student experience and internal program governance.

Action	First responsibility	Final Responsibility	Timeline
Assess the quality of the ITEC undergraduate applicant pool and determine if and how this impacts retention	Dean’s office will provide all relevant data to complete such assessment	ITEC will provide a report to the Dean’s office on retention patterns	June 2017

Develop a retention strategy to increase the current % of students who continue in the program after 2 years (39% in 2014)	Dean's office will provide all relevant data to complete such assessment	SIT will develop a strategic report on retention for presentation to the Dean's Office	September 2017
Complete the ongoing review and renewal of the undergraduate curriculum including the addition of more practice focused courses	School of Information Technology (SIT)	SIT to present a curricular report to the Dean's Office of steps already taken and future directions for curriculum at the undergraduate level	September 2017
Develop a more detailed and nuanced governance framework for the School of Information Technology (SIT), including a hiring protocol, which addresses issues experienced in the past.	School of Information Technology (SIT)	Dean's office will ensure compatibility with Faculty policy/practices and relevant documents	June 2017
Review of graduate program curriculum	School of Information Technology (SIT)	Presentation of curricular changes to the Associate Dean Graduate and Research	September 2017
Report on increasing student support at the undergraduate and graduate level	School of Information Technology (SIT)	SIT presenting the report to the Dean's Office for comment and support	September 2017

The Follow-up Report for the School of Information Technology is due in November 2018 and should provide a fulsome report on progress or completion of the items in the plan above.

Alice J. Pitt
Vice-Provost Academic
York University