

Digital Media, Undergraduate, School of Arts, Media, Performance and Design, with the Lassonde School of Engineering

Cyclical Program Review – 2008-2015

Final Assessment Report and Implementation Plan

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

Program Description

The Digital Media undergraduate program first accepted students in the 2008-2009 academic year. It was collaboratively developed over a number of years by faculty members in what was then the Department of Computer Science and Engineering (Faculty of Science and Engineering), Fine Arts Cultural Studies (Faculty of Fine Arts), and Communication Studies (Faculty of Arts). The program is a Specialized Honours Bachelor of Arts (120 credits taken over four years).

Program	Accepts 2014	Enrolment FTES 2014	Degrees Awarded 2014
Digital Media BA	41	86	12; 2 Certificates

Reviewers appointed by the Vice-Provost Academic:

Dr. Jeremy Cooperstock, Associate Professor, Electrical and Computer Engineering, Faculty of Engineering, McGill University

Dr. Paula Wilson, Senior Lecturer, Department of Biology, Faculty of Science, York University

Documentation Provided to the External Reviewers

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

- 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
- Dean's /Principal's Agenda of Concerns
- University, Faculty and Program planning documents

Site Visit: March 9, 2016

The Reviewers met with Spiros Pagiatakis, Associate Dean of Research & Graduate Studies; AMPD Digital Media Coordinator, Don Sinclair; the Lassonde Digital Media Coordinator, George Turlakis and the Director of



Computing from Lassonde. In addition the reviewers met with faculty from program, the University Librarians and also had a meeting with both the Dean of AMPD, Shawn Brixey and with the Dean of Lassonde, Janusz Kozinski. There was an opportunity to meet with 20 students from a fourth year class. Facilities visited included the Transmedia Lab in AMPD, the Art and Technology Learning Laboratory in AMPD, the Bergeron Centre for Engineering Excellence and the Scott Library.

A meeting with the Vice-Provost Academic was cancelled due to illness; however, the review team was advised that a phone meeting could be scheduled

Outcome:

The Joint-Committee on Quality Assurance concluded that the Decanal response adequately addressed the review recommendations. Progress on the recommendations will be included in the Follow-up Report due November 2018. The next CPR will begin in the Fall of 2022.

Strengths:

- The Digital Media program demonstrates a reasonable balance between the foundations of math, computer science, signal processing and “physical computing,” along with a wide range of electives that provide a level of nimbleness necessary given the rapid pace of change in the area. A fourth-year capstone course, offered by Electrical Engineering and Computer Science, Digital Media Project, was designed for the program. Learning outcomes are clearly articulated; however, as noted below, stronger mapping of outcomes to courses should be undertaken.
- In AMPD the Digital Media program has been well supported by a strong program coordinator.
- Two new Canada Research Chairs, who will hold cross-appointments in the new department of Computational Arts, signal commitment to the program, and the Deans of both Faculties are enthusiastic about the interdisciplinary and collaborative nature of this program.
- The program is supported by labs in AMPD, housing equipment and software and reflecting appropriate investments.
- Students may take advantage of the Professional Experience Program, which has recently been transferred to Lassonde from the central Career Services Centre, a change expected to result in an increased number of students taking advantage of this important opportunity.

Opportunities for Enhancement

The External Review Report provided commentary around a number of areas for improvement. The Reviewers did note, “There is strong evidence that the program has been responsive to issues as they arise and engaged in ongoing improvements and enhancements.” The recommendations made by the

External Reviewers resulted from their consideration of the self-study document, the Deans' Agendas of Concern, and comments made during meetings with faculty and students.

- The weak math skills of some incoming students create challenges in the program. An exploration of ways to close the gap in math and programming skills should be undertaken and consideration given to an additional math fundamentals courses, perhaps combined with a placement test to identify the need of students. Clarification of the importance of math for prospective students is essential.
- It is important, although not simple, to ensure that the Lassonde home of the Digital Media program, the Department of Electrical Engineering and Computer Science, be well supported in terms of student support as well as from the perspective of faculty members with a focus on improving the program.
- Advising for this program is Faculty based, and students have found it challenging at times as advisors from one or the other Faculty are not comfortable with advising about courses taught in the other area. The Faculties should improve advisor training and consider publishing an "advising fact sheet" and annual "group advising" sessions for students each spring. The program is encouraged to Monitor the students' understanding of requirements.
- Faculty members should increase interactions with the librarians to better exploit the library resources in support of student learning. The Reviewers noted, "The student experience, teaching approach and "retention culture" appear to be quite different in the two Faculties and would benefit from a higher level of integration/harmonization." The reviewers recommended that the program focus on ensuring there is coherence to the program, including, for example, the possibility of introducing digital-media-focused problems and applications within the introductory courses in the courses taught in the Department of Electrical Engineering and Computer Science (EECS). A clear curriculum map to program expectation and learning outcomes with courses would enhance coherence.
- Enrolment management practices for the courses taught through EECS create frustration and uncertainty in the minds of students. The program should take steps to mitigate this situation.
- Some senior level courses in EECS are not available to students as a result of prerequisites not being part of the program requirements, in spite of the fact that these courses are listed on the "suggested progress chart." The program needs to ensure students can benefit from these course options.
- The Program should seek input from experts on campus on how to achieve their goals regarding gender balance and how to enhance a learning environment where both genders are equally motivated to participate, collaborate and provide leadership.

Implementation Plan

The attached chart, collaboratively developed by the Deans of AMPD and Lassonde, addresses the recommendations, with suggested approaches and an identified lead for follow-up, specifies roles, responsibilities and a timeline for each action. The plan is commended for its clarity and commitment to ensuring collaborative stewardship of the program.

A follow-up report, due November 2018, will provide details of the outcomes.

Alice J. Pitt
Vice-Provost Academic
York University

Recommendation	Proposed Follow-Up	Responsibility for Leading Follow-up	Resources	Timeline for Addressing Recommendation
#1 - Provide more extensive program and advising information to new students. And #2 - Improve and coordinate program advising.	Visit two key courses annual (e.g., courses where students are unsettled with respect to knowing how the course(s) support future courses).	AMPD Digital Media Coordinator, LE Digital Media Coordinator, Digital Media Program Council	UPD Time	Fall 2017
	Establish bi-annual joint advising meeting and brainstorming session to enhance collaboration between LCS and AMPD advising teams. These sessions will include academics and non-academic administrators.	AMPD Digital Media Coordinator, LE Digital Media Coordinator, Digital Media Program Council, LSE Advising Team, AMPD Advising Team	UPDs and Advising Team Time	Fall/Winter 2017-2018
	Design and create student advising factsheets.	AMPD and LSE Advising Team	Advising Team Time	Summer 2017
	Design and create student FAQs.	AMPD and LSE Advising Team	Advising Team Time	Summer 2017
	Establish an advising process and procedures document (service agreement) between AMPD and LSE. (e.g., how/when/where to update advising information, articulate where students can go and for what purpose, outline and describe purpose of meetings and desired outcomes, etc)	Associate Dean AMPD, Associate Dean Lassonde, Chairs of both departments	Leadership Time	Summer 2017
	Review and make consistent, all online-advising materials relative to degree requirements.	AMPD and LSE Advising Team	Advising Team Time	Fall/Winter 2017-2018
	Institute mandatory advising for all digital media students in all years	AMPD and LSE Advising Team	Advising Team Time	Spring 2017
	Create a communications plan relative to increase unit cohesion.	AMPD	Assistant Dean in AMPD	Fall/Winter 2017-2018
#3 - Explore ways to close the gap in math and programming skills.	Review and evaluate student preparations in mathematics prior to program entry and identify possible ways to improve math experience, either with support prior to entry, or the introduction of a bridging course prior to MATH 1019.	AMPD Digital Media Coordinator, LE Digital Media Coordinator, Digital Media Program Council	UPD Time, Council Time	2017-2018 to change the curriculum; 2018-2019 for implementation
	Ensure student advising factsheets and FAQ resources include information on math support at York (E.g., Bethune services, liberal engineering, open math labs in science, etc)	AMPD Digital Media Coordinator, LE Digital Media Coordinator, to review	UPD Time	

	Secure agreement between LSE, AMPD, and FS to offer joint math support for MATH 1019.	Associate Dean AMPD, Associate Dean Lassonde	Leadership Time	
	Review course design in MATH 1019 and add tutorials.	AMPD Digital Media Coordinator, LE Digital Media Coordinator, Digital Media Program Council	UPD Time, Council Time MATH AND EECS dept curric. committees	
	Investigate whether computing requirements (e.g., EECS 1012) are appropriate or could be replaced by a second year program specific computing course.	AMPD Digital Media Coordinator, LE Digital Media Coordinator, Digital Media Program Council	UPD Time, Council Time	
	Review degree entrance requirements from one 4U math course to two 4U math courses in order to prepare students for 3rd and 4th year EECS courses	Digital Media Program Council, Math Dept	Council Time	
	Build required math (calculus, applied linear algebra) and programming (2nd year EECS) pre-requisites into Year 1/2 of the program, at least for Developer stream.	Digital Media Program Council	Council Time	
	Curriculum committee chair will encourage EECS 2030 and EECS 2011 course directors to offer digital media related assignments.	Digital Media Program Council	Council Time	
#4 - Improve communication and collaboration with program librarians.	Establish a bi-annual meeting with the subject matter librarian to review and discuss library needs relative to attempts at addressing curricular improvement.	AMPD Digital Media Coordinator, LE Digital Media Coordinator, Digital Media Program Council, John Dupuis, Librarian		Fall/Winter 2017-2018
	Finalize online resource guide for digital media students and faculty.	Rob van der Bliet, AMPD Digital Media Coordinator, LE Digital Media Coordinator,		
	Formally introduce initiatives, such as Steacie Hackfest participation, into DAT 2100.	AMPD Digital Media Coordinator, LE Digital Media Coordinator, Digital Media Program Council, John Dupuis, Librarian		

#5 - Invest resources to better understand the factors currently affecting retention, and develop strategies to improve retention.	Institute bi-annual meetings of academic leadership (e.g., Associate Deans, Chairs, UPDs) to discuss factors affecting retention and strategy development aimed at improving retention, with the information gathered from the following new activities aimed at underpinning how best to improve:	AMPD Digital Media Coordinator, LE Digital Media Coordinator, Digital Media Program Council	UPD Time, Council Time	Fall/Winter 2017-2018
	Determine the relationship between high school math and success in the program.	AMPD Digital Media Coordinator, LE Digital Media Coordinator, Digital Media Program Council, Teaching Commons	UPD Time, Council Time	Summer 2017
	Design and create a student survey, targeted at those transferring out of the program, to understand their reasons for leaving. Possible factors may include: workload, non-adequate preparations, student expectations changing, support, etc	ISR, Teaching Commons, AMPD Digital Media Coordinator, LE Digital Media Coordinator,	ISR, Teaching Commons	Fall 2017
	Implement and launch survey annually.	ISR, AMPD Digital Media Coordinator, LE Digital Media Coordinator,	ISR	Winter 2018
	Review survey results and evaluate how best to processed on implementing actions for continuous program improvement.	ISR, AMPD Digital Media Coordinator, LE Digital Media Coordinator,	ISR	Summer 2018
	Design, create, launch and review results of a student survey, targeted to students in each year level aimed at gathering information relative to their experiences.	ISR, AMPD Digital Media Coordinator, LE Digital Media Coordinator,	ISR	Fall 2017
	Establish formalized data requests of OIPA aimed at annual retention data analysis. Identify the levers OIPA uses to evaluate and model retention and evaluate how these data and levers can be used to inform retention strategies.	OIPA, AMPD Digital Media Coordinator, LE Digital Media Coordinator,	UPD Time	Fall/Winter 2017-2018
	#6 – Explore ways to increase recruitment and retention of women to the program.	<i>Increase the number of female Faculty members:</i>		
Finalize approval of Affirmative Action Plan for Computational Arts to prioritize gender balance.		Associate Dean AMPD	Associate Dean AMPD Time	Fall/Winter 2017-2018
Ensure both IRPs for LSE and AMPD include a priority to recruit females within the curriculum.		Associate Dean AMPD, Associate Dean LSE	Leadership Time	Fall/Winter 2017-2018

Ensure Department Plans for EECS and Computational Arts include a priority on hiring female faculty members	Associate Dean AMPD, Associate Dean LSE, Department Chairs	Leadership Time	Fall/Winter 2017-2018
<i>Increase the number of female students:</i>			
Continue to explore ways to encourage, reward and publicise participation in outreach, recruitment, student leadership, mentorship and creative activities related to inclusivity.	Lassonde lead, coordinate with AMPD	Assistant Dean of Inclusivity and Diversity in LSE, Director of Design and Recruitment in LSE	Summer/Fall 2017
Ensure all Digital Media students are invited to 50:50 initiatives implemented in Lassonde.	Lassonde lead, coordinate with AMPD	Assistant Dean of Inclusivity and Diversity in LSE,	Summer/Fall 2017