Final Assessment Report
BA Game Design and BSc Game Programming
Departments of Digital Humanities and Computer Science

Undergraduate Programs
(reviewed 2024/25)

A. Summary

1. The Program's Self-Study was considered and approved by the Senate Academic Review Committee January 23, 2025**.**
2. The Review Committee consisted of two external reviewers: Clark Verbrugge (McGill University) and Emma Westecott (OCAD University), and one internal reviewer, David Gabriel (Brock University).
3. The site visit occurred March 6-7, 2025.
4. The Reviewers' Report was received April 11, 2025.
5. The Senate Undergraduate Program Committee response was received April 29, 2025.
6. The Program Committee response was received May 12, 2025.
7. The Dean, Faculty of Humanities, response was received May 22, 2025.
8. The Dean, Faculty of Mathematics and Science, response was received May 26, 2025.
9. Annual Implementation Reports will be submitted from 2026-2029.
10. The next Cyclical Academic Review is scheduled to take place in 2032/2033.

The Self-Study was prepared under the conditions of the Codicil with the Review and responses conducted under the terms and conditions of the June 2023 IQAP.

Program Outcome Categories:

Based on their knowledge of the discipline, the content of the Self-Study and the interviews conducted during the site visit, the Review Committee gave the programs the following Outcome Categories:

Program(s)	Excellent Quality	Good Quality	Good Quality with Concerns	Non-Viable
BSc Game Programming			X	
BA Game Design			X	

If you have chosen 'Good Quality with Concerns', please summarize the specific concern(s) briefly below. If you have chosen 'Non-Viable', please summarize the specific reason(s) below.

GAME is an excellent program with significant potential. The main concern of the reviewers lies in the need for closer collaboration between program partners to enable GAME to grow and reach its full potential.

GAME partners - the Computer Science Department (COSC) and Digital Humanities Department (DDH) at Brock University and the School of Media at Niagara College - operate in very different ways at distinct scales. Digital Humanities host GAME yet have only 2.5 full time faculty (2 going on leave imminently) with a new hire coming summer 2025, Computer Science have a full complement of faculty, yet GAME students represent too small a percentage of overall student body to drive a subject-responsive curriculum. Niagara College, importantly, offer applied art, project management, and development courses not otherwise available at Brock specifically to GAME students in fixed day blocks across the program but are positioned and paid as a service unit.

Ideas for bridging this gap include both formal measures: e.g. a static schedule for student time at Brock versus NC, impact assessment of course content and scheduling changes, faculty-level working groups to address concerns and informal measures such as: guest lectures across the year from both partner institutions to pull cultures together, shared faculty brainstorming sessions, moving towards offering other pathways and internships (or a co-op program) for Niagara College game students at GAME, etc.

Executive Summary:

The Reviewers wrote:

The GAME program, a collaboration between Brock University (Brock) and Niagara College (NC), offers an excellent game design and development education with capstone game projects, benefiting from industry partnerships, scholarships, and internships. Challenges include the decline in the game industry, a competitive market, and administrative burdens from cross-institutional logistics. Innovative in its cross-institution structure, the program combines BA and BSc students in upper years, providing significant industry participation through internships and sessional instructors. Synchronous instruction in computer labs with state-of-the-art software and hardware is emphasized.

Physical space constraints limit expansion: exploring open-source tooling may reduce costs and encourage independence. Student development is facilitated by open lab access and technical support. Low class sizes limit growth but provide personalized instruction with generally positive student responses. Recommendations include improving coordination, increasing program flexibility, addressing space constraints, and improving representational diversity through outreach.

B. Program Strengths

The reviewers noted the following strengths:
GAME is a strong and creative program aimed at providing students applied, conceptual and critical skills for game design and development.

GAME program strengths include:

- Collaborations across programmes offer a broad array of disciplinary topics that build a foundational core shared literacy across streams of game programming and game design.
- GAME students specialize in upper years, coming together for capstone game projects.
- GAME students pick a stream, either BA Game Design or BSc Game Programming.
- A strong support team, with a dedicated office manager, technician and business relations manager, GAME enables meaningful partnerships with industry, yielding scholarships, significant internships (currently 40), and the ability to drive innovation across the local and regional game ecosystem through partnership with events like the Level Up Showcase.
- GAME students are in demand and ready for industry e.g. equity-oriented Ubisoft Scholarships for upper year students are meaningful to help build more equitable representation across the industry.
- As a cohort-based program GAME encourages collaboration which is a vital skill for students to develop and builds program identity.

C. Opportunities for Improvement and Enhancement

The reviewers noted the following challenges:

- The game industry is currently in decline and game education is more saturated with different program offerings leading to a more competitive market to attract students.
- The logistics of cross-institutional and cross-department joint programs.
- The cross-programme context involves significant administrative burden, including technical details in course scheduling, coordination of course content and student progression, managing the physical separation of Brock and NC. Managing student requirements across institutions creates friction at the student, instructor, and institutional levels.
- Switching Program Chairs between DDH and COSC every 3 years has not yet yielded deeper curricular collaborations. There needs to be a working group operating at the faculty level to build towards improving student experience, smoothing out administrative challenges and building collaborative courses that address student concerns and disciplinary needs.
- Restricting program size based on physical space constraints limits GAME's potential, there is significant opportunity to grow GAME based on current application numbers.

Recommendation #1: That the Program works to improve the academic coordination within Brock, and between Brock and Niagara College (NC).

Supporting/clarifying text: Almost all interviewees noted coordination concerns.

While travel between the institutions is inherent to the program, travel arrangements have a major impact on course scheduling and planning. In particular, different years following different travel schedules complexified course scheduling / offerings and introduced difficulties for students who fall out of the cohort due to individual course failures or for other reasons. The program may thus benefit from an effort to establish a more consistent and static schedule for student time at Brock versus NC to simplify course planning and which can more easily accommodate some variation in how students' progress through the program.

Rigidity of the program requires stronger monitoring of the impact of course content and scheduling changes. General program monitoring is present, but more formal impact assessment of changes that affect possible course content overlap or scheduling conflicts would help maintain overall program cohesion and reduce the potential for minor disruptions. Less formal efforts that encourage or facilitate cross-department or cross-institution interaction, such as through yearly social meetups of some form, may also be a means of improving communication.

The Program responded:
Brock's Office of the Registrar and Enrolment Services (ORES) works closely with department chairs, deans, academic advisors, faculty, and staff to ensure that travel and scheduling conflicts are kept to a minimum. Nevertheless, significant challenges persist. In addition to the multi-unit course delivery model, ORES must contend with faculty scheduling requests - some based on accommodations enshrined in various Collective Agreements and the provincial Human Rights Code—classroom/lab sizes, and financial constraints. The program will continue to work closely with the appropriate administrative units at both institutions to address this recommendation. Additionally, the program already offers several informal meetups for students, staff, and faculty, such as game jams, program showcases, workshops, and social/networking events. We will continue to do so.

The Dean of Humanities responded:
This is indeed a desirable outcome. As noted by the programme, academic co-ordination has many different aspects; the programme and the appropriate offices at both institutions have worked hard at keeping all the different pieces together, and will continue to do so.

The informal events and activities that the programme already organizes every year are an important aspect of the necessary communication among the different pieces.
Timeline: ongoing

The Dean of Mathematics and Science responded:
The reviewers make a valid point. I support the response from the program. However, two additional initiatives will support the planning process going forward: a university-wide four-year planning process for all departments and faculties that will provide more stability and clarity about program delivery and my Dean's Office directive to establish two-year course delivery plans.

The program's response is an on-going effort, but I anticipate consultations between all units (departments delivering the GAME programs, ORES and my office) to occur in the short-term (by spring 2026).

ARC Disposition of the Recommendation

ARC considers this recommendation to be accepted for consideration. The Committee believes that the Program, in consultation with the Deans' Offices and the Office of the Registrar and Enrolment Services (ORES), is best positioned to determine appropriate strategies to move forward on this issue.

Implementation Plan (1st Priority)	
Responsible for approving:	Program
Responsible for resources:	Program/Deans
Responsible for implementation:	Program/Deans
Timeline:	Dean of Humanities and Dean of Mathematics and Science to report by the end of academic year 2025-26.

Recommendation #2: That the Program works to improve the administrative coordination within Brock, and between Brock and Niagara College (NC).

Supporting/clarifying text: A 3-year, rotating appointment of the program chair limits the ability to form a long-term, consistent vision of program direction. We recognize that there are constraints on the duration of the formal appointment of program chairs; informal agreement to multiple terms, better aligning selection with sabbatical/leave constraints, or establishment and careful documentation of a long-term continuity plan may nevertheless improve this.
Frequency of meetings could be increased to balance and improve offerings across partner programs at both institutions. The addition of working groups with clear mandates across faculty to address specific issues would enable continuous program improvements. The intent is to increase porosity between programs in a more agile manner than is currently possible to continue to trouble-shoot, develop new shared curriculum, build joint program culture, etc.
Financial imbalance represents a long-term threat to program viability. Re-examining the financial agreement in order to ensure both Brock and NC both benefit from offering the program may be necessary.

The Program responded:

In our view, there are three separate recommendations for this item:

a) The first has to do with program leadership, i.e., the appointment of program directors. The program cannot accept this recommendation as it falls outside the BUFA Collective Agreement's stipulation that program directors will normally serve for three years (16.01.g.viii). There have been past program directors who have served outside of the three years through reappointment, and we will continue to assess reappointments on a case-by-case basis.
b) The second involves an increased frequency of meetings and establishing relevant working groups, which we accept. We will discuss more frequent meetings at our next program committee meeting and establish appropriate working groups.
c) The third involves the financial agreement between Brock and Niagara College, which we cannot accept as it is outside of the program's domain.

The Dean of Humanities responded:
As noted in the programme response, the various pieces of this portmanteau recommendation are, to a large extent, non-viable. We cannot circumvent collective agreements, and the financial arrangement is a matter for the senior administrative levels.
Timeline: not applicable

The Dean of Mathematics and Science responded:
The reviewers' feedback is appreciated, and I support the response by the program. To maintain a long-term plan through directorship changes, I suggest that the respective Deans of the program meet with the program committee once a year to discuss the program. This annual meeting, with the Deans and the program committee present, will ensure everyone is brought up to speed and can collectively maintain a consistent long-term plan. The Deans will also alert their respective Provosts (direct reports) to a potential review of the financial agreement.

I anticipate the implementation timeline for all items to be short-term (spring 2026).

ARC Disposition of the Recommendation
ARC acknowledges that the recommendation to improve the administrative coordination of the programs is worthy of consideration; however, the allocation of resources lies outside the jurisdiction of the Committee. ARC advises the Program, in consultation with the Deans' Offices, to develop strategies to move forward on this issue.

No Implementation Plan required.
Note: The Program is still encouraged to report on any activity annually.

Recommendation #3: That the Program pursues greater program flexibility and opportunities to improve intra-cohort synchronization to improve student experience.

Supporting/clarifying text: The BSc program has a longer on-ramp toward the game-development objective than the BA. Preparatory courses or a foundational year might be useful to build the necessary core background prior to formal entry into the program to better align the BA and BSc students. This may also allow for the inclusion of more electives or topics-courses that would give students greater breadth and reduce problems with program rigidity. Upper year special topics electives could help build towards rapidly evolving areas and thematics, building flexibility into program development.
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The Program responded:
The BA stream is already quite flexible; after 2nd year, BA students can select from a wide variety of electives from across the university. Nevertheless, the program committee will review potential electives to further increase flexibility in years 3 and 4 for BAs.

The challenge rests primarily with the BSc program, which needs to fulfill a series of course topics and credits to match the minimum requirements for a Computer Science degree at Brock and an advanced game development diploma from Niagara College (Game Development). These, in addition to the required IASC credits each year, take up most of the curriculum time, leaving little room for electives. This load of required courses is a challenge that the program acknowledges. The Computer

Science Curriculum Committee and GAME Steering Committee will work closely to ascertain the feasibility of providing students with greater flexibility while also ensuring the program meets the sufficient learning outcomes for a BSc in Computer Science and an Advanced Diploma in Game Development.

The Dean of Humanities responded:
The Dean approves the programme's plan to consider how to provide BSc students with the same degree of flexibility as the BA students, while retaining the necessary steps to proficiency.
Timeline: three years

The Dean of Mathematics and Science responded:
The reviewers make a valid point, and I support the program response. My office will support the proposed action by the program.

I anticipate the implementation timeline to be medium-term (spring 2027).

The Undergraduate Programs Committee responded:
The UPC Committee noted that Recommendation #3 (That the Program pursues greater program flexibility and opportunities to improve intra-cohort synchronization to improve student experience) may include changes to electives and courses which may require the attention of UPC.

ARC Disposition of the Recommendation
ARC considers this recommendation to be accepted. The Committee expects that the program will work with the Dean's Office, Faculty of Mathematics and Science, to determine appropriate strategies to move forward on this issue.

Implementation Plan (1st Priority)	
Responsible for approving:	Program
Responsible for resources:	Program/Dean FMS
Responsible for implementation:	Program/Dean FMS
Timeline:	Dean of Humanities and Dean of Mathematics and Science to report by the end of academic year 2025-26.

Recommendation #4: That the Program review space and resource constraints, that are limiting program capacity and make recommendations through normal channels of advocacy with the Dean.
Supporting/clarifying text: The program has growth potential but is strongly limited by lab-size. Increasing lab sizes would be a long-term solution, but allowing for student laptop use (BYOD) and reducing the dependency on synchronized lab-instruction is a more feasible and short-term route to mitigating these constraints.

The Program responded:
The program recognizes that space constraints impede growth. We will continue to advocate for increased space resources via the appropriate institutional channels. The program has considered a laptop program for some time but have opted not to implement one for a number of reasons. First, it

is an added cost to students; one of the recruitment draws for this program is that students have access to all the tools they require for completing their schoolwork. Secondly, a laptop program creates a number of pedagogical challenges for a program like this, which emphasizes collaborative work. It is essential that students have access to the same set of tools and versions of software; otherwise, considerable care has to be taken in order to avoid lost work. Having each student work on their own device, to work on large collaborative projects, is likely to create substantial barriers to success.

The Dean of Humanities responded:
The Dean acknowledges the resource limitations that the physical plant places on the programme. The programme is encouraged to review the current constraints, in accordance with the recommendation, and to continue working with the Dean's office on ways to meet the space and equipment needs.
Timeline: ongoing

The Dean of Mathematics and Science responded:
The reviewers' comments are valid, and I support the response of the program. The Faculty of Mathematics and Science is currently in the process of reallocating teaching spaces that will have a positive bearing on Computer Science.
Moreover, I support the move towards a BYOD policy and will support consultations with Brock's IT team to explore options.

I anticipate the implementation timeline to be medium-term (spring 2027).

ARC Disposition of the Recommendation
ARC acknowledges the importance of this recommendation. Although the allocation of resources lies outside the jurisdiction of the Committee, ARC advises the Program to review constraints and continue to advocate through available channels as appropriate.

No Implementation Plan required.
Note: The Program is still encouraged to report on any activity annually.

Recommendation #5: That the Program pursue opportunities to improve the low female representation, particularly in the BSc stream.

Supporting/clarifying text: A low female to male proportion is largely a function of the lower number of female applicants, but improvements may be possible by emphasizing diversity in the acceptance criteria and exploring the potential for high-school outreach to improve the intake ratio. The long work of building equitable representation is well documented and involves reaching out to target communities to ensure their meaningful involvement. Brock administration wanted a push towards gender parity in the program; a solid example regarding this is Harvey Mudd College (https://www.hmc.edu/about/).

The Program responded:
The program agrees with this recommendation and will increase efforts to recruit more women in both streams of the program. Outreach to High School (and perhaps earlier) is a much needed first step, as

gender roles tend to become concretized during this period and game development (especially Computer Science) continues to be masculine-coded culturally.

The Dean of Humanities responded:
The Dean appreciates the efforts that the programme has made to increase the proportions of women in the student body. The recommendation is approved and is a consummation devoutly to be wished. Timeline: two or three years to see real results of outreach at lower grade levels.

The Dean of Mathematics and Science responded:
The reviewers point out an obvious shortcoming of the program, and I support the response by the program. In addition to what is being proposed as a response, the Faculty of Mathematics and Science is now also hosting the FIRST Robotics Tech Provincial Championship for 2025, 2026 and 2027, which places a large emphasis on female participation from Ontario's high schools. It is a great opportunity to draw more female students into Computer Science and the GAME program.

I anticipate the implementation timeline to be medium-term (2025-2028).

ARC Disposition of the Recommendation
ARC considers this recommendation to be accepted. The Committee believes the Program, in consultation with the Deans' Offices and ORES, is best positioned to determine appropriate strategies to move forward on this issue.

Implementation Plan (1st Priority)	
Responsible for approving:	Program
Responsible for resources:	Program/Deans
Responsible for implementation:	Program/Deans
Timeline:	Dean of Humanities and Dean of Mathematics and Science to report by the end of academic year 2025-26.

D. Summary of Recommendations:

First Priority:
Recommendations: 1, 3, 5

Outside of ARC's jurisdiction:
Recommendations: 2, 4