Game Development – Advanced Programming

Ontario College Graduate Certificate Program

Program Code: **PGDAP**

Trafalgar Road Campus

If you require assistance regarding this document, please call 905-845-9430 and select option 4 or go to hub.sheridancollege.ca

If you require this information in an accessible format, or for Accessible Learning at Sheridan go to
https://www.sheridancollege.ca/student-life/student-services/accessible-learning-services

Contents

Program Eligibility

A. Postsecondary diploma or degree in computer science/programming

   OR

B. Demonstrated competence through related work and/or educational experience

Selection Process for Applicants

A. Applicants with a postsecondary diploma or degree in computer science/programming are selected based on GPA average in core courses (Programming and Math).

B. Applicants without a postsecondary diploma or degree in computer science/programming are required to submit supplemental documentation. All supporting documentation must be submitted as a digital PDF (Questionnaire, and Résumé). The supplemental documentation includes:

   - Response to a questionnaire
   - Résumé, which includes details of related work experience
   - A portfolio demonstrating computer science/programming skills (see page 4 for details)
   - Your portfolio programming components must be submitted through an online portal such as GitHub or GitLab. If you have collaborated on work, then please outline what your role was on the project in the questionnaire.

All applicants should have a solid background in programming and should already know OOP, Data Structures, Functional Programming.

Postsecondary transcripts indicating courses completed to date must be submitted at the time of application.

Applicants selected for the program will be notified by their Sheridan email account. Decisions will not be released over the phone. Fee, registration and timetable information will follow.

Classes for the fall term begin: Tuesday, September 8, 2026.

Academic Integrity

By submitting your Admission Requirements, you are agreeing to comply with Sheridan's Academic Integrity Policy. The Academic Integrity Policy states:

Sheridan College is committed to upholding the highest standards of academic integrity. The International Centre for Academic Integrity (ICAI) defines academic integrity as "a commitment, even in the face of adversity, to six fundamental values: honesty, trust, fairness, respect, responsibility, and courage. From these values flow principles of behavior that enable academic communities to translate ideals into action".

Applicants who are found to have falsified transcripts, cheated on admission tests, or submitted fraudulent documents or in any other way attempted to circumvent the admissions process in a manner inconsistent with the principles of academic integrity, will not be granted admission to the College. Those applicants will be ineligible for admission to any Sheridan program or course for a period of not less than 5 years, after which admission to the College will be reviewed on a case-by-case basis.

For programs where a supplemental submission is required as part of the admission process, the work should represent an applicant's own ideas, writing, projects and creations. Where others have contributed, or non-original ideas have been included, applicants will give proper recognition and reference. Applicants are not allowed to use advanced automated tools (artificial intelligence or machine learning tools such as ChatGPT) for written or visual components of supplemental submissions.

Additional Admission Requirements

To move forward in the processing of your application, submit the following documentation. It's in your best interest to do so as soon as possible.

RÉSUMÉ

Your résumé must outline your academic background and/or work experience. The résumé should clearly reflect the experience that you declare in the questionnaire as well as highlight your programming experience.

WORK SAMPLES

Your work samples should be accessible online through either GitHub or GitLab (preferably). Samples should include one or more of the following:

- Major project that you have worked on (individually or collaboratively).
- If your project was a collaboration you must outline what your contribution was to the project through a comment tag.
  Example: `// YOUR NAME: Explanation of code`
- Programs that you may have written for fun
- Assignment code from your previous experience

You can submit any combination of the above. The program relies on the applicant to demonstrate the ability to understand OOP and functional programming at a high level so that the applicant can learn the concepts of game development based off previous experience.

RESPONSES TO QUESTIONNAIRE

Complete and return the responses to the questionnaire provided in this document to help us assess your programming experience and your suitability for a career in game development. Your answers must be submitted as a single PDF document. Be sure to include your full name and Sheridan student ID number on your document.

Instructions for Online Submission
of Additional Admission Requirements

1. **LOGIN:** You will be required to use your Sheridan username and password to login to the online submission system at https://cerebro.ddi.sheridanc.on.ca/submit.

2. **READ THE INSTRUCTIONS:** Once you login you will be required to acknowledge that you have read the instructions.

3. **UPLOAD FILES:** Select "Upload Files" to submit your résumé, link to GitHub or GitLab repository, and questionnaire responses.

4. **READ THE SPECIFICATION** for each category and verify that your files are suitable. When you are ready to upload, drag your files into the appropriate drop zone. When the upload is complete, you will either see the files you have submitted added to your list, or a message describing the problem with the submitted file.

5. **SUBMIT FOR EVALUATION:** If you are finished selecting and uploading files, you may now click "Submit for Evaluation" to notify Sheridan that your portfolio is complete and ready for grading. During the grading process, your files will be locked and unable to be changed.

Additional Information

- **Check your Sheridan email account frequently**. Many of the communications you receive from Sheridan come to you exclusively via your Sheridan email account.

- If you require assistance regarding this document, please call 905-845-9430 and select Option 4 to speak with an Information Specialist in our Contact Centre.

- If you have any additional questions, please visit our Service Hub Customer Service Portal — your one-stop destination for getting help, finding answers, and staying connected. Alternatively, most questions can be answered by consulting with our chatbot.

Game Development – Advanced Programming
APPLICANT QUESTIONNAIRE

Please complete the following short answer questions.

1. Please explain why you are applying to the program and what specific skills or knowledge you hope to gain from the program (100 – 300 words).

2. Below are five major areas of game development,
   - Gameplay Programmer
   - AI Programmer
   - Tools Programmer
   - Graphics Programmer
   - Network Programmer

   a) Of the areas above, which one interests you the most. Explain your answer.

   b) What experience or skills do you have in any of these areas?

3. How much programming experience do you have? Briefly describe the most challenging programming project that you have ever worked on. What made the project challenging? What was your contribution?

4. Provide a list of your GitHub or GitLab link(s) to your projects for review.

5. Complete the self-assessment below.

Please complete the following self-assessment questions.

Assess your skill set on a scale of 1 to 5 where 1 indicates no experience, and 5 advanced/professional expertise. If you assess a skill at 4 or 5, for programming questions, your GitHub or GitLab should reflect your skill level.

1. Programming

No Experience, have never programmed before	Some basic skills, have written "Hello World" but not much else	Basic understanding. Have written a few small programs	Education in programming. My previous program was entirely programming	Advanced-skills or work experience. Have written many major projects.
1	2	3	4	5

2. Linear Algebra

No Experience with algebra	Some basic understanding of linear algebra	Basic understanding. Understand vector math and can write most operations.	Education in Linear Algebra. Understand vector and matrix math. Can write most operations.	Advanced-skills or work experience. Strong understanding of vector, matrix and quaternion math. Can program a library for these.
1	2	3	4	5

3. C/C++

No Experience, have never programmed this language	Some basic skills, have written "Hello World" but not much else	Basic understanding. Have written a few small programs	Education in programming. Used this language in my previous education	Advanced-skills or work experience. Have written a major project.
1	2	3	4	5

4. C#

No Experience, have never programmed this language	Some basic skills, have written "Hello World" but not much else	Basic understanding. Have written a few small programs	Education in programming. Used this language in my previous education	Advanced-skills or work experience. Have written a major project.
1	2	3	4	5

5. Web Scripting (HTML, Javascript, Actionscript, Processing)

No scripting experience	Can implement existing scripts	Use simple scripting. Have written some websites that use scripting	Education in programming. My previous program was based off scripting languages	Advanced-skills or work experience. Have written many projects using scripting languages.
1	2	3	4	5

6. Java

No Experience, have never programmed this language	Some basic skills, have written "Hello World" but not much else	Basic understanding. Have written a few small programs	Education in programming. Used this language in my previous education	Advanced-skills or work experience. Have written a major project.
1	2	3	4	5

7. Unity

No Experience, have never programmed this language	Some basic skills, have written "Hello World" but not much else	Basic understanding. Have written a few small programs	Education in programming. Used this language in my previous education	Advanced-skills or work experience. Have written a major project.
1	2	3	4	5

8. Unreal

No Experience, have never programmed this language	Some basic skills, have written "Hello World" but not much else	Basic understanding. Have written a few small programs	Education in programming. Used this language in my previous education	Advanced-skills or work experience. Have written a major project.
1	2	3	4	5

9. Teamwork

No collaborative team development	Teamwork limited to classroom projects	Some experience working in workplace teams	Managed a workplace team	Managing teams, producing products for client needs
1	2	3	4	5