



LaSalle College

COMPUTER SCIENCE TECHNOLOGY VIDEO GAME PROGRAMMING

**DEC DIPLOMA OF COLLEGE STUDIES
DAY | 6 SEMESTERS**

420.AX

There's a whole new world waiting for you...

Are you an avid gamer? Do you wish you understood the technological operating mechanisms behind a video game? Combine passion and work by becoming a key player in the video game industry.

Developed in collaboration with studios ranked among the global leaders in video game creation and editing, the Computer Science Technology program, with the Video Game Programming specialization, will enable you to acquire the knowledge necessary to secure a choice position in the industry. You will be able to contribute to the design of a Triple-A game, join a multidisciplinary team from an independent studio, produce a mobile app and even launch your own game.

With the help of programming tools greatly used by the industry, this program will allow you to master the fundamental concepts of video game programming, grow your creativity and your communication skills related to the gaming world and work with different players of the industry to integrate a multidisciplinary team.

*Are you an avid gamer? You see yourself writing programming code in your future career?
If you're not scared of intense and demanding work (but that is totally worth it!), this
program is made for you.*

PROGRAM OBJECTIVES

The Computer Science Technology DEC – Video Game Programming computer science technicians specialized in video game programming.

At the end of this program, the student will be able to join a development team, develop different tools according to the programming languages, problem solve and make necessary corrections to a video game. The student's expertise in video game design will enable him or her to integrate into a multidisciplinary team in an innovative setting.

CAREER PROSPECTS

- Video game developer
- Analyst/programmer
- Application analyst
- Database administrator
- Computer science technician

You can also pursue your studies in Software Engineering at the university level. When obtaining an Information Technology DEC diploma, you are automatically eligible to enroll at École de technologie supérieure (ÉTS)





PROGRAM CONTENT

CONCENTRATION COURSES

- Applied Mathematics
- Elements of Data Processing for Video Game
- Structured Programming
- Profession and Industry
- Applied Mathematics
- Object Oriented Programming and Concepts I
- Information System and Project Methodology I
- Graphic Environment
- Object Oriented Programming and Concepts II
- Game Engine I
- Data Bases
- Operating Systems
- Game Engine II
- Advanced Data Structure
- Computer Networks
- Applied Statistics for Computer Science
- Communications and Interfaces
- Game Engine III
- Internet Programming I
- Development Databases Applications
- Information System and Project Methodology II
- Internship

GENERAL EDUCATION COURSES

- 3 Physical Education Courses
- 3 Humanities Courses
- 4 Language and Literature Courses
- 2 Second Language Courses
- 2 Complementary Courses

* The College reserves the right to substitute certain courses.

LEVEL

- This program leads to a Diploma of College Studies (DEC).
- Holders of a Diploma of College Studies (DEC) can either begin to work in their field or pursue university studies.

ADMISSION CRITERIA

Have obtained a Secondary School Diploma (DES) and completed the following courses :

- Language of Instruction from Secondary V
- Second Language from Secondary V
- Mathematics TS or SN 5e (or Math 526)
- Physical Sciences from Secondary IV
- History from Secondary IV

Have obtained a Professional Studies Diploma (DEP) and completed the following courses:

- Language of Instruction from Secondary V
- Second Language from Secondary V
- Mathematics TS or SN 5e (or Math 526)

Have obtained an equivalent education or an instruction deemed sufficient. Every case will be analysed by the college.

PARTICULAR CONDITIONS

Each student must have a personal laptop or be willing to purchase one before starting the program:

- CPU: Intel i7 or more
- RAM: 8 GB or more
- Hard disk space: HDD 512 GB or more
- Graphic card: GTX 2 GB or more
- Connectivity: USB 3.0, NIC LAN and Wi-Fi. Plan having a USB-RJ45 adaptor if the laptop does not have a network port.

Note: These specific requirements also apply to MacBook laptops.

PROGRAMMING TOOLS

Java, C#, Microsoft Visual Studio .NET, Microsoft technologie, HTML, CSS ORACLE, SQL, Microsoft Visual C++, UML, Flash Action Script, JavaScript, Unreal, Unity, Agile, Scrum, 3 Studio Max.

