GAME - DESIGN AND SIMULATION (GMDS)

Calling all aspiring game creators! Embark on a life-changing adventure

Unleash your imagination! Delve into game design theory and application as you train to create immersive experiences across video games, augmented reality, and virtual reality. Learn to design and develop commercial-quality games, simulations, and experiences for a broad range of industries such as entertainment, health, education, construction, marketing, mining, and worlds yet to be explored.

Over the course of the program, you'll go from concept to market-ready gaming worlds. You'll explore the art and science of developing authentic scenarios for both consumer enjoyment and commercial training in this ever-evolving medium.

Program highlights

- No portfolio required to gain admission
- Gain the skills to become an entry-level game creator
- Expert faculty and industry partners
- Learn on industry-standard software
- Create 2D and 3D portfolios in your chosen specialization of game design

Program of study for 2025-26 Academic Year

Semester 1		Credits
ENG 1002	College Communications	3
GME 1001	Game Psychology	3
GME 1003	Introduction to Programming	3
GME 1004	Game Level Design	3
GME 1005	Game Design Theory I	3
GME 1007	Game Engine Development	3
GME 1023	Game Asset Creation 2D	3
	Credits	21
Semester 2		
GME 1002	Stories, Quests and Missions	3
GME 1009	Game Animation	3
GME 1011	Object-Oriented Programming	3
GME 1024	Advanced Engines and Algorithms	3
GME 1025	Workshop I	3
GME 1223	Game Asset Creation 3D	3
One General Education Course [1]		3
	Credits	21
Semester 3		
GME 1010	Game Design Theory II	3
GME 1013	Game Mechanics and Prototyping	3
GME 1015	UI UX for Games	3
GME 1016	Game Production	4
GME 1020	AI for Games	3
GME 1027	Workshop II	3
IND 1105	Decolonizing the Creative Arts	1
One General Education Course [1]		3
	Credits	23
Semester 4		
GME 1017	Introduction to Entrepreneurship	3
GME 1019	Game Sound and Music	3
GME 1022	Game Development Capstone Project	8
GME 1026	VR and Simulation in Gaming	4
One General Education Course [1]		3
	Credits	21
	Total Credits	**86**

[1] For more information regarding General Education courses, click here (https://cambriancollege.ca/general-electives/).

Admission requirements

For graduates of the new curriculum (OSS): Ontario Secondary School Diploma (30 credits) or equivalent or mature student status including:

- Any grade 12 English (C) or (U)

Program delivery

2025-2026
Fall term start

SEMESTER 1: Fall 2025
SEMESTER 2: Winter 2026
SEMESTER 3: Fall 2026
SEMESTER 4: Winter 2027

Winter term start

SEMESTER 1: Winter 2026
SEMESTER 2: Spring 2026
SEMESTER 3: Fall 2026
SEMESTER 4: Winter 2027

Specific program pathways

College or university degree opportunities

If you are a graduate of this program, you may continue your studies at a college or university and you may receive credit(s) for your prior college education. Refer to Cambrian's college and university agreement (https://cambriancollege.ca/supports-services/articulation-agreements/universities-in-canada/) details for further information.

Employment opportunities

Graduates are prepared for employment opportunities in the computer gaming industry as:

- Game Marketer
- Software Developer
- Software Engineer
- Project Manager
- Creative Director for Software Development
- Video Game Development
- Simulation Designer