



# BACHELOR IN GAME DESIGN

Training Program

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# B2GD Program

2nd year of the Degree

## Year Curriculum

UV01 - Game Culture

UV02 - Fundamentals of Game Design

UV03 - Game Design Science

UV04 - Game Prototypes

UV05 - Phygital Games

UV06 - Design Thinking Project

UV07 - Board Game Industry

UV08 - Board Game Project

UV09 - Game Development

UV10 - Graphic Design

UV11 - CLuBB Project Finalization

## Purpose

UV01

### **GAME CULTURE**

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#### **Description**

The Game Culture module provides students with a foundational understanding of games upon which future creations can be built. The key lesson is that every game is shaped by the historical and cultural context of its time.



## Objectives

- 1 Expand knowledge of games**
- 2 Learn how to conduct research**
- 3 Contextualize and analyze game evolution throughout history**

## Purpose

UV02

### **FUNDAMENTALS OF GD**

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#### **Description**

The Fundamentals of Game Design module aims to establish the core principles required to identify and understand what makes great games. The essential elements of “games” and “design” are explored and analyzed.



## Objectives

- 1 Acquire the fundamentals needed to create high-quality games**
- 2 Design a first minimalist board game**
- 3 Design a first party game playable without any physical materials**
- 4 Get to know classmates and find one's place within the cohort**

## Purpose

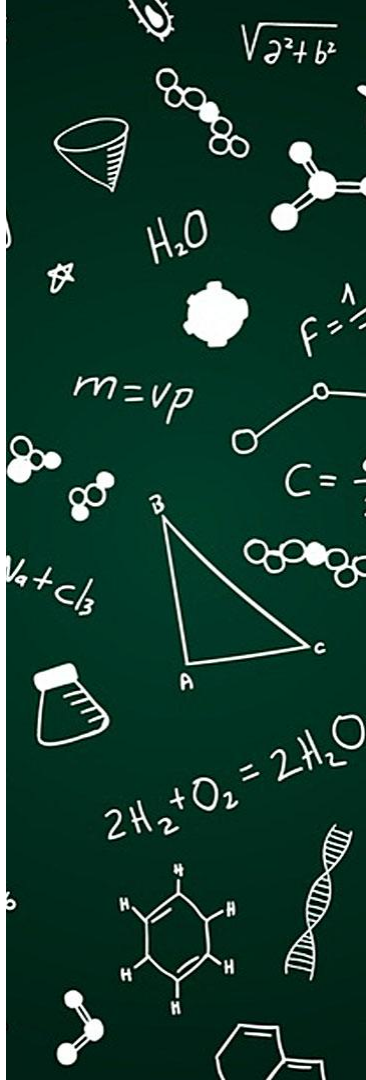
UV03

### GAME DESIGN SCIENCE

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#### Description

The Game Design Science module introduces a more structured and analytical approach to game creation by treating game design as a discipline that can be studied systematically. Students also acquire a precise technical vocabulary used within the industry.



## Objectives

- 1 Discover game theory
- 2 Approach game design as a science
- 3 Explore game mechanics
- 4 Acquire a technical vocabulary related to game design



## Purpose

UV05

### PHYGITAL GAMES

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#### Description

The Phygital Games module expands students' game design foundations with virtually limitless possibilities. By exploring phygital games—the combination of physical and digital experiences—students gain access to new creative perspectives.



## Objectives

- 1 Explore the combination of physical and digital games
- 2 Strengthen research practices
- 3 Develop new creative perspectives and approaches

## Purpose

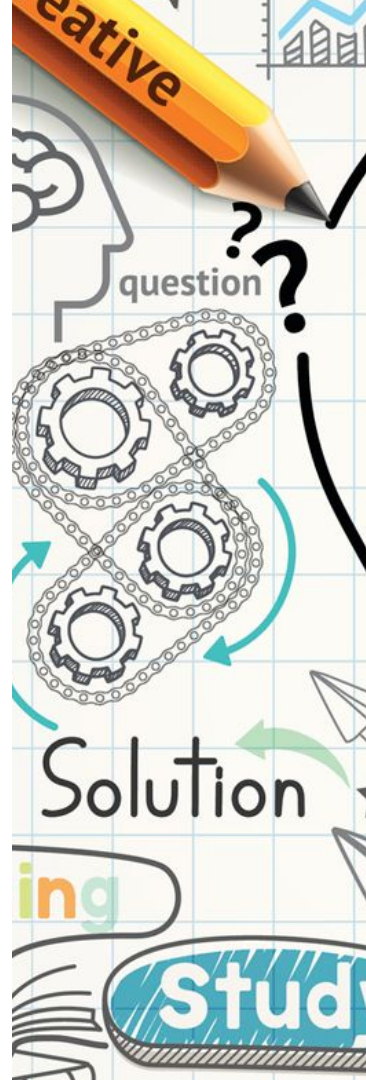
UV06

### **DESIGN THINKING PROJECT**

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#### **Description**

The Design Thinking Project module provides an opportunity to apply design methodologies in a variety of contexts. Students learn to understand the mechanisms, processes, and stages involved in design thinking and related approaches.



## Objectives

- 1 Apply design methodologies in an unconventional context**
- 2 Expand creative thinking techniques**
- 3 Synthesize a creative process**
- 4 Demonstrate autonomy and initiative**

# Purpose

UV07

## **BOARD GAME INDUSTRY**

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### **Description**

The Board Game Industry module provides the essential knowledge needed to understand the market and the key players within the tabletop gaming industry. This understanding helps students develop future creations with a clear value proposition and market positioning.



# Objectives

- 1 Understand an industry
- 2 Identify key stakeholders and current market trends
- 3 Position a game concept within the contemporary market

# Purpose

UV08

## **BOARD GAME PROJECT**

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### **Description**

The Board Game Project module introduces students to the design and development of a board game over the course of an entire semester. Students are guided through the process of identifying a strong concept, refining its value proposition, and structuring the game around it.



# Objectives

- 1 **Propose an innovative concept**
- 2 **Establish a coherent game system**
- 3 **Structure and organize a GD**
- 4 **Develop a project within the context of a game design competition**

## Purpose

UV09

### **GAME DEVELOPMENT**

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#### **Description**

The Game Development module provides the techniques required to develop and refine a game through tuning, balancing, and playtesting. The game is tested with a variety of audiences in order to evaluate and improve the player experience.



## Objectives

- 1 Develop a game**
- 2 Identify adjustable gameplay**
- 3 Tune and balance a game**
- 4 Conduct playtests with different target audiences**

## Purpose

UV10

### GRAPHIC DESIGN

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#### Description

This module allow to define, refine and produce the visual assets required for the game. These elements enhance usability, comprehension, and the overall enjoyment of interacting with the game.



## Objectives

- 1 Source visual assets for a game
- 2 Improve game ergonomics through effective visual design
- 3 Create an appropriate logo and visual identity for the game
- 4 Design and implement a rulebook template with a focus on readability and visual appeal

## Purpose

### UV11 CLUBB PROJECT

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#### Description

The CLuBB Project Finalization module focuses on completing the game currently in development. Students produce all deliverables required by the CLuBB competition and defend their projects to a jury.



★ CENTRE LUDIQUE ★  
DE BOULOGNE-BILLANCOURT



A screenshot of a social media post from the 'LUDOTHÈQUE' section. The post is in French and English, announcing the end of registrations for the 40th Boulogne-Billancourt Game Competition. It includes a 'Partager' button with Facebook and Twitter icons. The text reads: '124 PARTICIPANTS AU 40E CONCOURS DE BOULOGNE-BILLANCOURT' and 'Les inscriptions du 40e Concours de Boulogne-Billancourt se sont terminées le vendredi 29 janvier 2021. Les jeux participent à cette édition 2021.' Below this, the English translation is provided: 'The registrations for the 40th Boulogne-Billancourt Game Competition ended Friday January 29, at 11pm. Games participate in this 2021 edition.' The word 'Lire' is partially visible at the bottom right.

## Objectives

- 1 Finalize the development of a game
- 2 Write clear game rules
- 3 Present and justify a design project in a professional manner

# **B3GD Program**

3rd year of the Degree

## **Year Curriculum**

**UV01 - Video Game History**

**UV02 - Video Game Development**

**UV03 - Game Design Techniques**

**UV04 - Genre Study Project**

**UV05 - Level design**

**UV06 - Game Design Documentation**

**UV07 - Self-Directed Learning**

**UV08 - 3D Level building**

**UV09 - Graphics Programming**

**UV10 - Bachelor's Project**

## Purpose

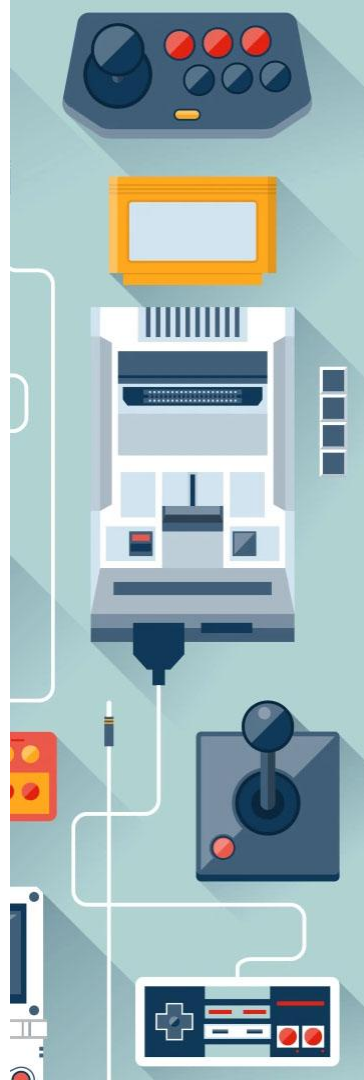
UV01

### **VIDEO GAME HISTORY**

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#### **Description**

The Video Game History module invites students on a journey through time and across the world to explore the origins of video games and understand their evolution. The module enriches students' creative background and cultural knowledge.



## Objectives

- 1 Discover the evolution of video games**
- 2 Understand how video games are shaped by the context**
- 3 Expand one's video game culture to build a stronger creative foundation.**

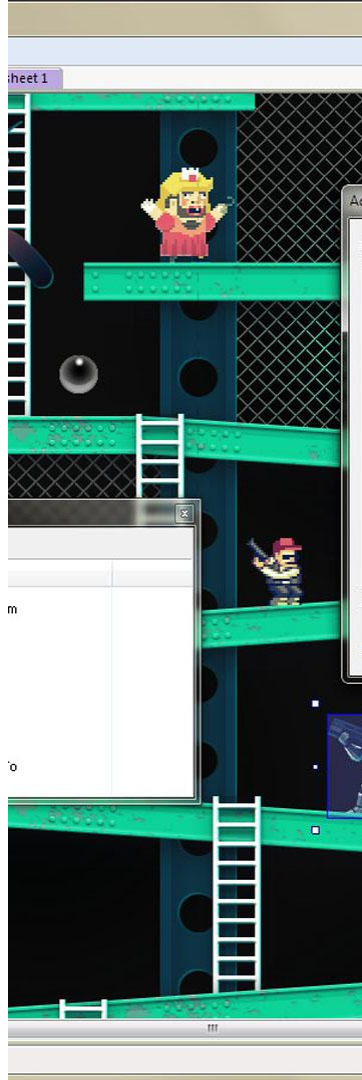
# Purpose

UV02  
**VIDEO GAME DEVELOPMENT**

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## **Description**

The Video Game Development module allows students to take part in a five-week video game production project developed in teams alongside game artists specializing in pixel art. The primary objectives are to understand the production pipeline and deliver a playable vertical slice.



# Objectives

- 1 Understand the stages of video game development**
- 2 Learn how to use the Construct game engine**
- 3 Develop a vertical slice**
- 4 Collaborate effectively within a multidisciplinary team.**

## Purpose

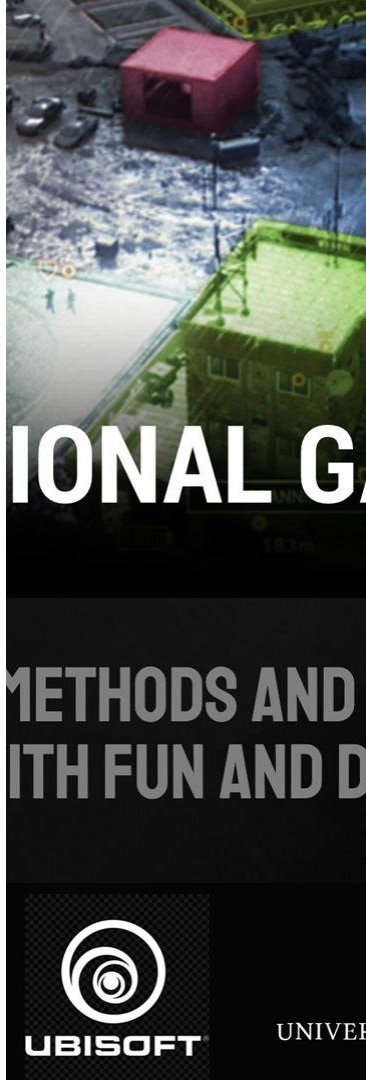
UV03

### **GAME DESIGN TECHNIQUES**

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#### **Description**

The Game Design Techniques module introduces students to a more advanced and systematic approach to game design. Rational Game Design (RGD) methodologies are applied to existing video games in order to analyze, deconstruct, and better understand their underlying systems.



## Objectives

- 1 Apply Rational Game Design methodologies**
- 2 Identify atomic parameters and Level Design patterns**
- 3 Design progression systems**
- 4 Design reward systems**

## Purpose

### UV04 GENRE STUDY PROJECT

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#### Description

This module focuses on the study of a specific video game genre. Students analyze its mechanics, audience, evolution and identify opportunities for innovation. The knowledge acquired then serves as a basis for designing original and forward-thinking game concepts.

# VIDEO



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- Explore fi
- Includes

ARKIN

## Objectives

- 1 Conduct a study of a video game genre
- 2 Identify the defining characteristics of a game genre
- 3 Analyze landmark titles that have shaped the evolution of the genre
- 4 Propose innovative game concepts that contribute to the genre's evolution



# Purpose

UV05  
**LEVEL DESIGN**

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## **Description**

The Level Design module introduces students to the creation of game levels while emphasizing coherence, player guidance, pacing, and the effective distribution of gameplay content across time and space.



# Objectives

- 1 Design video game levels**
- 2 Create both paper-based and digital level layouts**
- 3 Ensure the quality and relevance of distributed gameplay content**
- 4 Apply Rational Level Design (RLD) methodologies.**

## Purpose

UV06

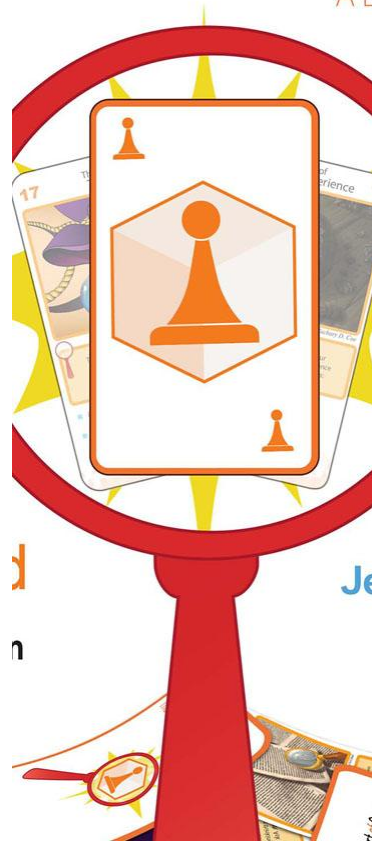
### **GAME DESIGN DOCUMENTS**

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#### **Description**

The Game Design Documentation module focuses on documentation techniques, enabling students to accurately describe game concepts and features in order to communicate them effectively to a development team.

TENTH ANNIVERSARY  
**Art of Game I**  
AE



## Objectives

- 1 Document a game concept or gameplay feature**
- 2 Use a variety of documentation tools and methods**
- 3 Structure documentation to make it both comprehensive and accessible**
- 4 Present and advocate for the potential of an idea within a milestone-driven production context**

## Purpose

UV07

### **SELF-DIRECTED LEARNING**

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#### **Description**

The Self-Directed Learning module allows students to select a Bachelor-level course from the Artline catalog in order to complement their existing knowledge and explore new personal and professional interests.



## Objectives

- 1 Extend learning and explore new fields of interest**
- 2 Demonstrate autonomy and initiative in project work**
- 3 Present and communicate the outcomes of independently conducted work effectively**

## Purpose

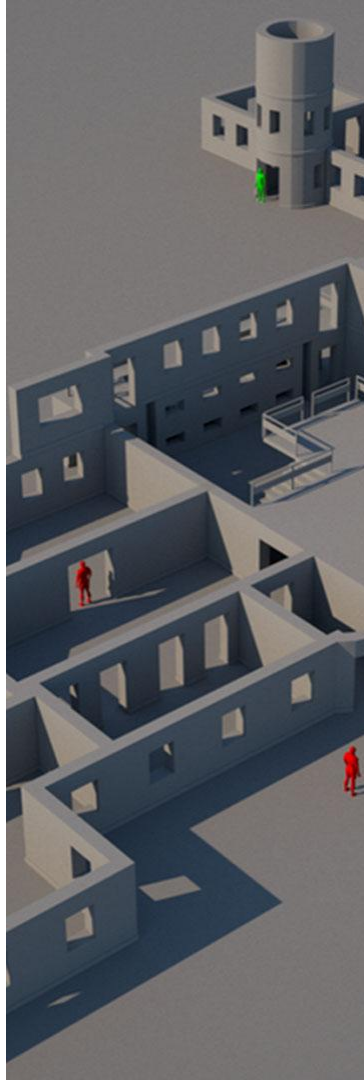
UV08

### **3D LEVEL BUILDING**

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#### **Description**

The 3D Level Building module introduces students to the design of 3D environments and their iterative implementation using various 3D tools such as SketchUp and Unreal Engine.



## Objectives

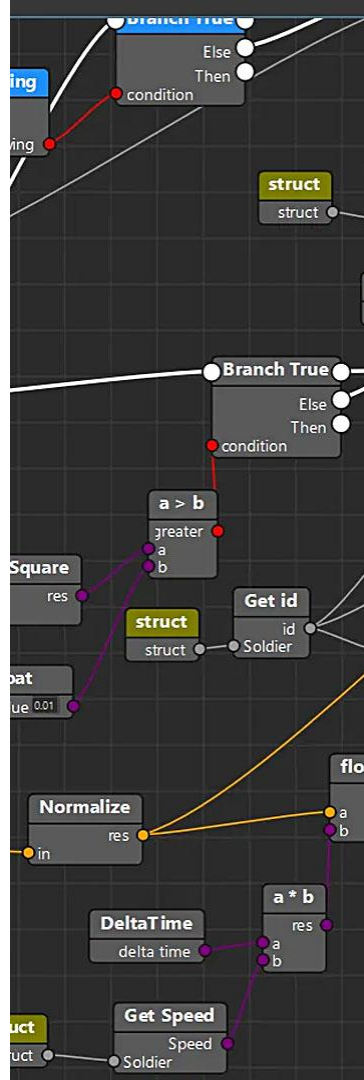
- 1 Design high-level map layouts**
- 2 Iterate on level designs from paper prototypes to digital tools.**
- 3 Use the core features of Unreal Engine**
- 4 Apply greyboxing and blockmesh techniques**

# Purpose

UV09  
**GRAPHICS PROGRAMMING**

## Description

The Graphics Programming module introduces students to the principles and practice of visual scripting. Drawing on concepts derived from traditional programming, students create gameplay sequences and interactive systems using scripting tools within Unreal Engine.



# Objectives

- 1 Understand the principles of visual scripting
- 2 Create gameplay sequences using a node-based scripting approach
- 3 Learn how to use Unreal Engine's Blueprint system

## Purpose

UV10

### **BACHELOR'S PROJECT**

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#### **Description**

The Bachelor Project serves as the culmination of both the Game Design and Game Art programs. Over a three month period, the project demands significantly higher ambitions in terms of both scope and quality, while encouraging students to apply the skills and knowledge acquired throughout their studies.



## Objectives

- 1** Initiate the development of an innovative video game
- 2** Deliver a playable vertical slice
- 3** Apply skills acquired
- 4** Work effectively within a team

## **Special thanks to our mentors**

**Dylan Dab  
Théo Rivière  
Dominique Breton  
Gwennaël Codet-Hache  
Léa Fauquemberg  
Doria Roustan  
Mathieu Blayo  
Guillaume Gigleux  
Sébastien Lafond  
Mathias Guillaud  
Géraud de Courrèges  
Tommy Ha Phuoc  
Marc Albinet  
Rémi Gallet  
Rémy Boicherot  
Vincent Barrières  
Pierre Gaudillère**