



DBLN CPSI 4494

This course is being offered at Griffith College, CAPA's academic partner in Dublin. The Irish academic system differs from the US, particularly with grading. Griffith College professors expect students to undertake a good deal of independent study to achieve a high mark in their classes. For additional information about this class, please contact the Boston Program Advising Team at 1-800-793-0334.

Games Development

Continuous Assessment: 100%

Intended Module Learning Outcomes

On successful completion of this module learners will be able to:

1. Explain phases in game development (from idea to product)
2. Produce a method and schedule for a production
3. Describe game system architectures.
4. Discuss level design and engagement
5. Discuss ludology and emergent behaviour
6. Develop a small sized game to a usable level
7. Define the structure of a games engine using a design pattern

Module Objectives

This module focuses on the design and development of digital games using a standard games development environment. The module has a strong practical element focussed on developing skills in game development. The learner also covers the core elements of game design and engagement with the user.

Module Curriculum

History of Electronic Game Development

- Early games
- Types of Game
- Game Technology

Introduction to Game Programming Concepts

- The game loop
- Handling user input
- Collision detection
- Events and triggers
- Models and animation
- Non-player characters
- Sound and effects
- Level design
- Engaging the user
- Emergent gameplay

Structure of the Games Engine

- File structure
- Layers
- Particle effects
- Lighting

Programming for the Games Engine

- Scripting
- Events and triggers
- Creating new entities and properties
- Creating methods and events
- Deployment
- Level design