

Course Title (to be shown on Certificate of Achievement)	Level Equivalence	Total Learning Hours
Level 2 Certificate in 3D Computer Games Design & Development	2	240

**Units:**

Unit Number	Unit Title	Mandatory (please tick)	Optional (please tick)
004	Advanced Game Making Techniques	X	
005	Advanced 3D Modelling	X	
006	Advanced Game Development	X	

In order to achieve a full certificate, learners must successfully complete....	3	mandatory units and ...	0	optional units
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Are there any progression opportunities following successful completion of the course?	By completing this course, students can move to our course: NCFE IIQ – Level 3 Certificate in 3D Computer Games Design & Development
What guidance and support is available for learners?	Course handbook (Printed & Digital) Tutorials delivered by competent tutors during guided learning hours Online video tutorials E-mail communication & support with tutors Guidance for obtaining required hardware & software (alternatively students can use the studio outside teaching hours)
Assessment Please provide information about the assessments that a learner must meet in order to enable them to achieve this course, eg observation, essay, short answer questions etc	Students will need to submit a playable 3D video game level, which must include logical functionalities, as well student generated 3D models & materials.  Submission must be made in a digital format (such as USB, CD/DVD, etc.)
Internal verification Please give a brief description of how the course will be internally verified	The course will be verified by an internal qualified verifier on 2 stages: 1. Verification of Assignment briefs 2. Verification of tutor's assessment
Course monitoring and review Please describe the ongoing monitoring and review activities that will be applied	The course will be monitored and reviewed by the following steps:  1. Teaching observation by an experienced tutor 2. Student feedback sheets 3. Internal verifier feedback 4. External verifier feedback
What is the target date for the accredited course to start?	September 2018
What is the target date for the first issue of certificates?	May 2019
What are the anticipated number of times the course is to be delivered per academic year?	5
What is the anticipated number of learners per course?	50

**Our course is primarily targeted at pre 17s. We aim to encourage younger students to study computer games design & development.**  
**Most of our learning outcomes will also be tool specific. Meaning learners will have to show their understanding of highly technical tools such as *Autodesk 3D Studio Max, Unreal Engine 4 & Adobe Photoshop.***

## Unit 01 [Game Making Techniques]

### The learner will:

- 1 Understand the elements required to create an engaging gameplay

### The learner can:

- 1.1 Introduce assets which contribute to the gameplay of a game
- 1.2 Position environmental assets to form an engaging level using a modern game engine

### The learner will:

- 2 Understand advanced game mechanics which compliment gameplay

### The learner can:

- 2.1 Create advanced environmental assets to help players progress in game
- 2.2 Create advanced game hazards to provide exciting challenges for players

### The learner will:

- 3 Understand methods for the creation of advanced interactive assets

### The learner can:

- 3.1 Create advanced interactions between multiple game assets
- 3.2 Create advanced interactions between playable character and environmental assets

## Internal Assessment Guidance – Unit 01:

Type of evidence	Assessment criteria	Additional information
Submitted assignment: Playable game level	1.1, 1.2	Playable game level could include the playable area, restricted by walls or other 3D assets. Platforms to jump on and/or over. The placement of each asset must be done based on a valid

		reason which contributes to the game.
Submitted assignment: Blueprint Scripts	2.1, 2.2	The creation of advanced assets which will contain complicated blueprint scripts.
Submitted assignment: Blueprint Scripts	3.1, 3.2	Interaction between multiple game assets must be advanced and use different communication channels such as event dispatchers and casting.

## Unit 05 [Advanced 3D Modelling]

### The learner will:

- 1 Understand the advanced application of 3D Modelling

### The learner can:

- 1.1 Identify correct topology on 3D assets
- 1.2 Allocate correct poly-count for 3D assets

### The learner will:

- 2 Understand advanced 3D Modelling tools & Techniques

### The learner can:

- 2.1 Create environmental 3D assets
- 2.2 Create hard-surface models

### The learner will:

- 3 Understand advanced material & texturing processes for video game assets

### The learner can:

- 3.1 Create customized textures using a modern 3D application
- 3.2 Create and apply advance materials to 3D objects

## Internal Assessment Guidance – Unit 02:

Type of evidence	Assessment criteria	Additional information
Assessor observation records	1.1, 1.2,	Assessor observation record should include the date the Assessor observed the candidate, a record of the assessment criteria observed and brief comments on the candidate's performance.
3D Files (.Max, .FBX, etc.)	2.1, 2.2, 3.1, 3.2	3D models must be created with textures and materials applied to the items.

## Unit 06 [Advanced Game Development]

### The learner will:

- 1 Understand packaging methods in computer games development

### The learner can:

- 1.1 Choose appropriate settings for packaging a 3D game
- 1.2 Package a 3D video game for its intended operating system

### The learner will:

- 2 Understand debugging approaches to a 3D game

### The learner can:

- 2.1 Find error logs in a game engine
- 2.2 Identify causes of errors located in error logs

### The learner will:

- 3 Understand monitor resolutions and their importance in gameplay

### The learner can:

- 3.1 Create customized screen resolution settings for a 3D game
- 3.2 Enable auto full-screen modes for intended games

## Internal Assessment Guidance – Unit 02:

Type of evidence	Assessment criteria	Additional information
Packaged file	1.1, 1.2,	Game must be packaged for an intended operating system. The game must also be tested to ensure it is compatible with intended operating system.
Observation	2.1, 2.2,	Game error logs must be located and effecting errors addressed.
Packaged file	3.1, 3.2	Game HUD must contain resolution settings and an option for enable full screen automatically.