

Course Title (to be shown on Certificate of Achievement)	Level Equivalence	Total Learning Hours
Level 1 Award in 3D Computer Games Design & Development	1	120

Units:

Unit Number	Unit Title	Mandatory (please tick)	Optional (please tick)
001	3D Level Design & Interactive Functionalities	X	
002	3D Modelling, Materials & Texturing	X	
003	3D Game Level Management & Shipping	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 2 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: <ol style="list-style-type: none"> 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: <ol style="list-style-type: none"> 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 [3D Level Design & Simple Functionalities]

The learner will:

1 Understand methods for the creation of playable 3D game environments using a modern game engine

The learner can:

- 1.1 Use 3D transformation tools on 3D objects in a modern game engine
- 1.2 Position environmental assets to form a playable level using a modern game engine

The learner will:

2 Understand automated game mechanics which help or complicate progression in game

The learner can:

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

The learner will:

3 Understand methods for the creation of interactive assets

The learner can:

- 3.1 Create interactions between multiple game assets
- 3.2 Create 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. Positioning of objects must be relevant to the limitation of the player character, such as how high the

		player can jump to reach a platform, or how fast they can run.
Submitted assignment: Blueprint Scripts	2.1, 2.2	Automated assets to help progression can include, moving platforms, rotating platforms, seesaw, etc. Hazardous challenges can includes areas players must avoid, such as spikes, fire, smokes, etc.
Submitted assignment: Blueprint Scripts	3.1, 3.2	Interaction between multiple game assets can include a laser beam colliding with another environmental asset other than the player. Interactions between game assets and the player character can be a lift which is only activated once the player character enters its area.

Type of evidence	Assessment criteria	Additional information
Assessor observation records	1.1; 1.2 2.3; 2.4; 2.5 4.1; 4.6; 4.7	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.

Unit 02 [Introduction to 3D Modelling]

The learner will:

- 1 Understand the application of 3D Modelling

The learner can:

- 1.1 Identify differences between 2D & 3D objects.
- 1.2 Identify the advantages and disadvantages of 3D modelling.

The learner will:

- 2 Understand 3D Modelling tools & Techniques

The learner can:

- 2.1 Create Three Dimensional shapes
- 2.2 Create modified 3D objects from standard primitives.

The learner will:

- 3 Understand material & texturing processes for video game assets

The learner can:

- 3.1 Create textures using a modern 3D application
- 3.2 Create and apply 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 03 [Game Engines & Third-party assets]

The learner will:

1 Understand methods for exporting and importing assets between multiple applications.

The learner can:

- 1.1 Export assets from a 3D modelling software using appropriate settings for destination application.
- 1.2 Import assets from a 3D modelling software using appropriate settings for third-party application.

The learner will:

2 Understand procedures to replace native assets with third-party assets

The learner can:

- 2.1 Use placeholders in the engine.
- 2.2 Replace existing game engine assets with imported assets

The learner will:

3 Understand collisions within a game engine

The learner can:

- 3.1 Create collisions for imported assets
- 3.2 Edit collisions for imported assets

Internal Assessment Guidance – Unit 03:

Type of evidence	Assessment criteria	Additional information
.FBX files	1.1, 1.2,	Assets must be exported from a 3 rd party application as FBX files, using the appropriate settings for the destination software.
Game Engine Files	2.1, 2.2, 3.1, 3.2	Assets must be placed and used in the game engine. Collisions for assets must also be checked and set to correct sizes.