

<b>Module Title:</b>	The Virtual Environment 1
<b>Language of Instruction:</b>	English
<b>Credits:</b>	5
<b>NFQ Level:</b>	8
<b>Module Delivered In</b>	<a href="#">1 programme(s)</a>
<b>Teaching &amp; Learning Strategies:</b>	Lectures Tutorials Private study Practical sessions within a laboratory
<b>Module Aim:</b>	To give the student the theoretical knowledge and practical understanding of the application of visual effects pipeline and rendering in using relevant software. The aims of the subject are: (1) to develop a greater knowledge of the principles and practice of project management, general management and health and safety; (2) to develop a knowledge of and understanding of the management of the human resource; (3) to develop leadership, business development, management and negotiation skills; (4) to develop an entrepreneurial spirit
<b>Learning Outcomes</b>	
<i>On successful completion of this module the learner should be able to:</i>	
LO1	Demonstrate an understanding of Visual Effects Rendering
LO2	Understand UnrealEngine pipeline, components and development environment
LO3	Implement 3D Set Design in a virtual environment
LO4	Demonstrate an understanding of project management and the management of other resources in a construction environment
LO5	Apply current management techniques in project management and safety management in a construction environment, manage and negotiate materials and plant resources for a construction project using modern techniques
<b>Pre-requisite learning</b>	
<b>Module Recommendations</b>	
<i>This is prior learning (or a practical skill) that is recommended before enrolment in this module.</i>	
No recommendations listed	
<b>Incompatible Modules</b>	
<i>These are modules which have learning outcomes that are too similar to the learning outcomes of this module.</i>	
No incompatible modules listed	
<b>Co-requisite Modules</b>	
No Co-requisite modules listed	
<b>Requirements</b>	
<i>This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.</i>	
No requirements listed	

## Module Content & Assessment

Indicative Content
<b>(1) Introduction</b> Introduction to Visual Effects and the virtual world
<b>(2) Unreal Engine Components</b> Virtual world User Interface , Asset Workflow, Components
<b>(3) Realtime Rendering</b> Camera Rigging, Lighting, Video Export
<b>(4) Project Management</b> (a) Project management Code of Practice and PMBoK (b) Project Management Plan and Production workflows (c) Project Procurement Methods (d) Project Lifecycle, (e) Scope Management (f) Time Management (g) Cost Management (h) Uncertainty and risk management (i) Change management (j) Quality management
<b>(5) Supply Chain, Materials and Plant Management</b> (a) Purchasing strategies and systems (b) Negotiation (c) Plant management (d) Supply Chain Management

Assessment Breakdown	%
Continuous Assessment	20.00%
Project	20.00%
Practical	20.00%
End of Module Formal Examination	40.00%

Continuous Assessment				
Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Case Studies	2 x Continuous Assessment Case Studies	4,5	20.00	n/a

Project				
Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Project	Construct a virtual set	1,2,3	20.00	n/a

Practical				
Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Practical/Skills Evaluation	Lab practical's in using relevant software and platforms	1,2,3	20.00	n/a

End of Module Formal Examination				
Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Formal Exam	No Description	1,2,3,4,5	40.00	End-of-Semester

SETU Carlow Campus reserves the right to alter the nature and timings of assessment

**Module Workload**

<b>Workload: Full Time</b>		
<i>Workload Type</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>
Lecture	Every Week	1.00
Tutorial	Every Week	2.00
Estimated Learner Hours	Every Week	4.00
Total Hours		7.00

**Module Delivered In**

Programme Code	Programme	Semester	Delivery
CW_CGSDC_B	<a href="#">Bachelor of Science (Honours) in Set Design and Construction</a>	7	Mandatory