

<b>Module Title:</b>	Motion Graphics
<b>Language of Instruction:</b>	English
<b>Credits:</b>	10
<b>NFQ Level:</b>	6
<b>Module Delivered In</b>	<a href="#">1 programme(s)</a>
<b>Teaching &amp; Learning Strategies:</b>	This module is delivered as a mix of traditional lectures and practical sessions within a laboratory setting with a blend of interactive lectures and practical work. Learners are actively participating in class work throughout each scheduled session. Students will be assigned practical exercises that address the learning outcomes.
<b>Module Aim:</b>	To give the student the theoretical knowledge and practical understanding of the application of computer graphics, animation and physics to game development.
<b>Learning Outcomes</b>	
<i>On successful completion of this module the learner should be able to:</i>	
LO1	Demonstrate an understanding of graphics fundamentals
LO2	Demonstrate an understanding of the fundamentals of the physics of motion
LO3	Implement and demonstrate 2D games incorporating graphics and physics simulations.
LO4	Creation of animated objects
<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>Introduction</b> Devices, Graphics, interaction
<b>2D Techniques</b> Animated images in Games, Procedural Content Creation, User interaction
<b>Interactive Graphics</b> Sprites , Ray Casting, Lighting, Rendering, Textures, Particle Effects,
<b>Using an Animation Editor</b> Create animations using an Animation tool, including rigging, skinning and Posing
<b>Physics</b> Motion with Vectors, applying forces to rigid bodies, collision response

Assessment Breakdown	%
Project	70.00%
End of Module Formal Examination	30.00%

No Continuous Assessment

Project				
Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Project	Small projects in Programming for graphics and animation and physics	1,2,3,4	35.00	Week 6
Project	Small projects in Programming for graphics and animation and physics	1,2,3,4	35.00	Week 11

No Practical

End of Module Formal Examination				
Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Formal Exam	formal written exam	1,2,3,4	30.00	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	12 Weeks per Stage	2.00
Laboratories	12 Weeks per Stage	6.00
Independent Learning	15 Weeks per Stage	10.27
Total Hours		250.00

**Module Delivered In**

Programme Code	Programme	Semester	Delivery
CW_KCCGD_B	<a href="#">Bachelor of Science (Honours) in Computer Games Development</a>	4	Mandatory