

PART A: GENERAL INFORMATION

1. Module Title		Motion Graphics 3D (EXMG7002)
2. School		Escape Studios
3. Level		7
4. Total Credits/ ECTS Value		30 (15 ECTS)
5. Total Synchronous Contact Hours		300
6. Programme(s) to which the Module Contributes		MA Motion Graphics
7. Related Modules	Pre-requisites	None
	Co-requisites	None
	Post-requisites	None
	Excluded Combinations	None
8. External Accrediting Body (<i>If applicable</i>)		N/A
9. Modes of Study		Full-time
10. Delivery Site(s)		Escape Studios, London

PART B: MODULE LEARNING OUTCOMES**11. Learning Outcomes**

On successfully completing the module students will be able to:

Demonstrate Knowledge & Understanding of...

1. The iterative processes and techniques involved in 3D ideation for motion graphic creation.
2. The trends in 3D motion graphic and design production and industry processes.
3. The relationship between 3D and 2D approached to design, and problem-solving.

Demonstrate Intellectual Skills in...

4. Critically evaluating and selecting 3D tools and solutions in relation to the limitations of a project brief and target project output.
5. Analysing the impacts of design, art and technical issues and iterate to inform new ideas and direction.
6. Employing agile practices in reaction to changes in project production.

Demonstrate Subject Specific Skills in...

7. Using industry standard concept creation tools and techniques to create 3D and 2D art for use across multiple disciplines to a professional standard.
8. Creating 3D solutions and concepts within the technical limitations of a project brief.

9. Creating art direction and visual guidelines for the process of constructing 3D tools to inform production.

Demonstrate Transferable Skills in...

10. Working to meet individual and group objectives.
11. Researching, designing, planning and delivering a project that can adapt to meet a strict set of industry objectives within time and in technical requirements.

PART C: RATIONALE AND DELIVERY

12. Synopsis of the Curriculum

- 3D Composition
- Animating a simple scene using keyframing, looping and dynamics
- Cloners and generators and how to use them
- Controlling effectors and other objects using fields
- Using primitives, generators and deformers to model basic shapes
- Edit mode
- Manipulating points, edges and polys to edit and sculpt polygonal geometry
- PBR, material types, reflectance channel
- Megascans, bricks material, displacement
- Applying materials to prims and meshes with UV wrapping
- Rendering tests and adjust render settings
- Main light types, HDRI, 3-point studio lighting
- Common tricks like flags and gobos
- Adding camera animation
- Compositing rendered animation
- Track mattes
- Grading, FX and colour correction

13. Learning and Teaching Methods

The module follows the Project module model, with tutor-directed project work the primary mode learning mode. Students are introduced to relevant theory in the context of the project, using their knowledge and understanding from the craft modules to respond to a given brief.

14. Contact Hours

Module Credit Value	Scheduled Learning Activities	Guided Independent Study	Total Hours
30 credits	Skills Sessions (45 hours) Studio time (45 hours)	Preparation for classes, guided research, assignment preparation and development (210 hours)	300 hours

15. Assessment Methods

Formative Assessment

Formative assessment will be provided throughout the module, both in terms of feedback on work in progress during the contact hours.

Summative Assessment**Assignment 1: Individual Motion Graphics Project (75%)**

Approximately 6 weeks of development work.

Assignment 2: Individual Presentation (25%)

Approximately 15 mins

Re-sits

Students who fail this Module will be permitted to submit revised assessment components in accordance with the Academic Regulations

16. Map of Module Learning Outcomes to Learning, Teaching and Assessment Methods

Learning outcome	1	2	3	4	5	6	7	8	9	10	11
Learning/ teaching											
Skills Sessions	x	x	x	x	x	x	x	x	x		
Studio Time	x	x	x	x	x	x	x	x	x		
Self-Directed	x	x	x	x	x	x	x	x	x	x	x
Assessment method											
Individual Motion Graphics Project	x	x	x	x	x	x	x	x	x		x
Individual Presentation					x			x		x	x

17. Indicative Reading List

This is an indicative list, correct at the time of publication. Reading lists will be published at least annually.

- Birn, J. (2017). Digital Lighting and Rendering. New Riders.
- Lammers, G. (2014). Advanced 3D Game Programming with DirectX 12. Mercury Learning and Information.
- McFarland, S. (2014). ZBrush Character Sculpting: Volume 1. CreateSpace Independent Publishing Platform.
- Bourke, P. (2016). Blender For Dummies. For Dummies.
- Laseeter, J., & Price, D. (2019). The Art of 3D Computer Animation and Effects. Wiley.
- Kerlow, I. (2004). The Art of 3D Computer Animation and Effects. Wiley.
- Lanier, D., & Cooper, T. (2017). Maya Character Creation: Modeling and Animation Controls. Sybex.
- Mocap Club. (2018). Motion Capture in Performance: An Introduction. Routledge.
- Galanakis, M. (2015). Learning Three.js: The JavaScript 3D Library for WebGL. Packt Publishing.
- Watkins, S. (2017). The Complete Guide to Blender Graphics: Computer Modeling & Animation. CRC Press.
- Blain, M. (2018). 3D Animation for the Raw Beginner Using Maya. CRC Press.
- McFarland, S. (2013). ZBrush Character Creation: Advanced Digital Sculpting. Sybex.

- Horn, B. (2014). 3D Computer Graphics: A Mathematical Introduction with OpenGL. Cambridge University Press.
- Parent, R. (2012). Computer Animation: Algorithms and Techniques. Morgan Kaufmann.
- Villar, E. (2014). Maya Studio Projects: Dynamics. Sybex.

18. Inclusive Module Design

We recognise and have incorporated the expectations of current equality legislation, by ensuring that the module is as accessible as possible by design. Additional alternative arrangements for students with Inclusive Learning Plans (ILPs)/declared disabilities will be made on an individual basis, in consultation with relevant policies and support services. Furthermore, the module design has sought to embed inclusive curriculum content.

Date of initial approval	July 2024
Date of revision	N/A
Version number	1
Effective from	September 2024