

Glasgow School of Art Course Specification
Course Title: Advanced 3D Modelling

Please note that this course specification is correct on the date of publication but may be subject to amendment prior to the start of the Academic Year.

Course Code:	HECOS Code:	Academic Session:
PELC235		2026-27

1. Course Title:
Advanced 3D Modelling

2. Date of Approval:	3. Lead School:	4. Other Schools:
PACAAG August 2026	School of Innovation and Technology	This course is available to students on PGT programmes which include a Stage 2 elective.

5. Credits:	6. SCQF Level:	7. Course Leader:
20	11	Dr Austin Wolfe

8. Associated Programmes:
This course is available to students on PGT programmes which include a Stage 2 elective.

9. When Taught:
Stage 2, This course is approved for delivery in both in-person and online modes

10. Course Aims:
This Course is offered as a cross-school elective to PGT students. The overarching aims of the cross-school electives are to: • Encourage interdisciplinary, critical reflexivity from within an open set of choices; • Foster deep investigative approaches to new or unfamiliar areas of practice and theory; • Cultivate self-directed leadership and initiative-taking in both applied and abstract modes of practice/ study not necessarily associated with a student's particular creative specialism; • Enable flexible, ethical exploration and connection of diverse knowledge and understanding within a specialist programme of study. This course will provide an opportunity for students to engage in a highly self-directed 3D art/visualisation project in line with their individual interests or aspirations. This allows students to advance their 3D modelling and visualisation practices in line with their practice specialisms.

11. Intended Learning Outcomes of Course:

By the end of this course students will be able to:

- Demonstrate a critical understanding of a range of specialised principles and concepts of 3D modelling for visualisation.
- Plan and execute a visualisation project, through to the preparation of a finished 3D model, scene, or animation
- Use a range of software to support and enhance 3D modelling work, and undertake critical evaluations of the range of 3D data and models used and created
- Critically review, consolidate and extend skills in 3D modelling and composition

12. Indicative Content:

This course is for students who already have some prior experience of working with 3D modelling applications for visualisation. The course will help them to develop their knowledge, creative practice and expertise of a range of principles, techniques and tools while working on a project focus of their own choosing.

The course will provide support to students to consolidate the following expected skills and knowledge:

- Model detailed and efficient scenes for animated and real time output
- Texturing and material properties for games and pre-rendered scenes (including UV mapping)
- Photo-texturing with different 3D levels of detail
- Normal mapping for higher quality visual outputs with lower level of three-dimensional detail
- Effective lighting and camera configuration for both still images and animated scenes
- An introduction to specialised texturing software
- 3D modelling project organisation

13. Description of Summative Assessment Methods:

Students may choose a focus for their own projects, in discussion with the course tutor. This will allow students to select a 3D modelling project in the area of their own interest with guidance to ensure suitable scope and ambition for an advanced 3D modelling project, building on their prior experience and skills. As such the project is assessed as a whole (Critical Reflection and Portfolio). The critical reflection should include discussion of the context, new discovery and research.

All submissions will require:

- A digital 3D project, including final rendered outputs (still and/or video as appropriate)
- supporting documentation with a minimum of a 1000 word critical reflection of the project, including discussion of actions on feedback – Any peer or tutor feedback that influenced creative decisions or practice should be clearly noted and reflected upon.
- 3D asset files
- An asset list clearly differentiating third party content from student created assets.

Assessment Method	Description of Assessment Method	Weight %	Submission week (assignments)
Personal 3D Art/Visualisation Project.	Critical Reflection (1000 words) and portfolio of 3D	100	Week 11, Stage 2

	visualisation outputs and supporting documentation		
13.1 Please describe the Summative Assessment arrangements:			
Submission will be via Canvas. If project files are too large for upload to Canvas, students may submit a SharePoint/GSA OneDrive folder link to Canvas. Feedback will be delivered via Canvas. All work will be assessed in accordance with the GSA Code of Assessment.			

14. Description of Formative Assessment Methods:
In taught sessions, students will have opportunities to discuss progress with the course tutor, to obtain ongoing formative feedback as they progress through the course. A formal formative assessment point midway through the Course (Week 6) asks students to submit a proposal and initial development work for their final submission via Canvas, with written feedback provided. The submission should include a description, illustrated by sketches or initial renders, of what students aim to achieve and consideration of what challenges or barriers the student may face in implementing this. Students should also include consideration of render times in this submission.
14.1 Please describe the Formative Assessment arrangements:
Formative feedback will be provided regularly during classes as part of class discussion and instruction. Formal, written, formative feedback will be provided via Canvas for midpoint formative work submitted to Canvas.

15. Learning and Teaching Methods:	
Formal Contact Hours	Notional Learning Hours
20	200
15.1 Description of Teaching and Learning Methods:	
The class will be taught over 10 Weekly classes – 2 hours teaching time per week. Lectures and seminars are used to disseminate theoretical, contextual and historical knowledge and address specific issues underpinning practical work. Lectures also have the broad aim of generating further debate in seminars, tutorials or further enquiry in self-directed learning or research. Labs, Tutorials, Workshops, and Practical sessions provide students with hands-on experience. These sessions usually follow or relate to lectures and take place in computer laboratories as practical classes. Lecturers/Demonstrators will be on-hand during the sessions to help students and answer their questions. Tutorials vary between individual student-tutor tutorials, group tutorials and workshops. These provide opportunities for scaffolded problem solving and discussion, and for broader discussion of the programme themes and topics. In online mode, the same range of activities take place with live classes taking place on Teams or other videoconferencing software. For example, on screen demonstrations will be provided, with students expected to follow along on their own computers. Live online sessions are further supported through the use of Canvas and Teams for asynchronous interactions between students and tutor.	

The availability of online or in-person delivery will be detailed in the PGT Electives Handbook each academic year, and made clear at point of offer and point of selection.

Whether in-person or online, teaching will follow a similar format with tutor led sessions providing key information, examples and demonstrations of tools, workflows and processes. Teaching will focus on core concepts, ideas and processes in a tool-independent manner, with explicit examples for specific software included as appropriate.

16. Pre-requisites:

This is an advanced course in 3D modelling and animation for 3D Visualisation, and as such only suitable for students with prior experience in 3D modelling in 3D Studio Max, Maya, Blender or Cinema 4D or similar software packages.

17. Can this course be taken by Exchange/Study Abroad students?	Yes
18. Are all the students on the course taught wholly by distance learning?	No
19. Does this course represent a work placement or a year of study abroad?	No
20. Is this course collaborative with any other institutions?	No
20.1 If yes, then please enter the names of the other teaching institutions:	
N/A	

21. Additional Relevant Information:

3D computer graphics are an inherently visual medium, involving working with visual display units.

22. Indicative Bibliography:

The course indicative reading and online resource list is accessible via [Resource Lists](#).