# Glasgow School of Art Course Specification
# Immersive Systems 1 - Foundations

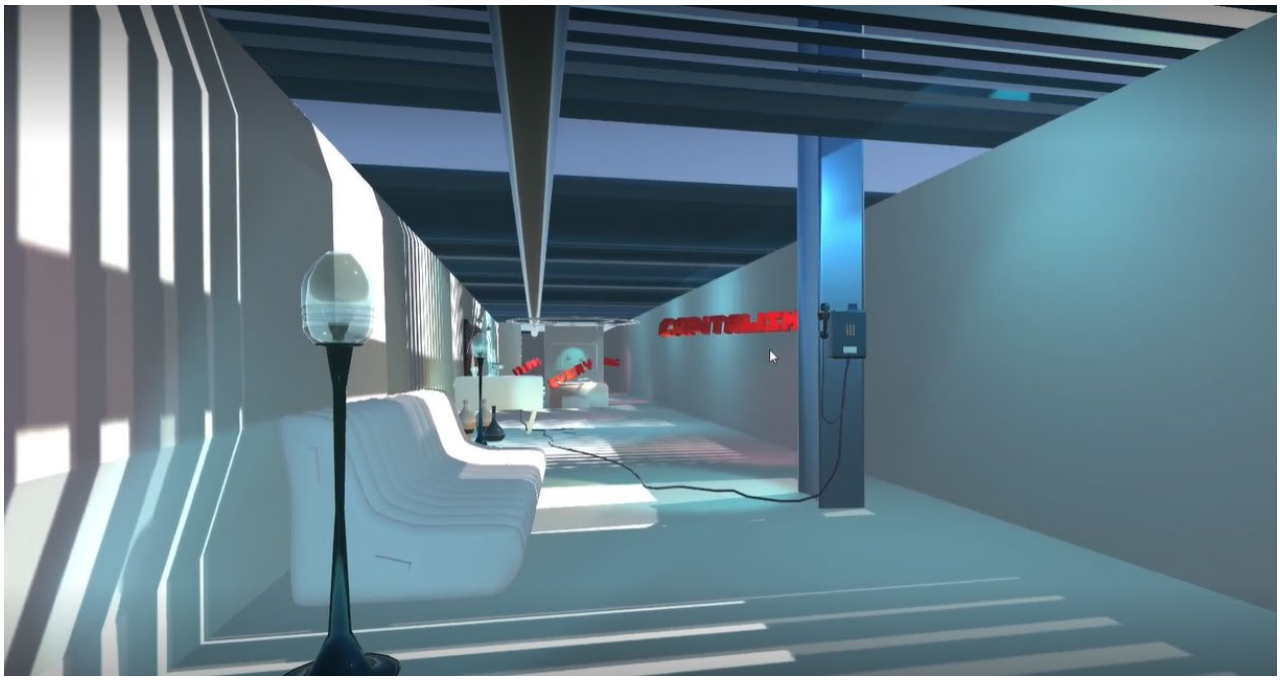

Image credit: Veliko Ivanov, BSc Immersive Systems Design (2022)

*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 2025-26 Academic Year.*

| Course Code | HECOS Code | Academic Session |
|---|---|---|
| | | 2025-26 |

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| **Course Title** | Immersive Systems 1 - Foundations |
| **Course Contact** | Fraser Dougan |

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| **Credits** | 20 |
| **SCQF Level** | 7 |
| **When Taught** | Stage 1, Semester 1 |

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|---|---|
| **Associated Programmes** | BSc (Hons) Immersive Systems Design |
| **Lead School** | School of Innovation and Technology (SIT) |
| **Other Schools** | N/A |
| **Date of Approval** | PACAAG August 2024 |

**Course Introduction**

This course aligns with established processes in the discipline and serves as an introduction to the conceptualisation, planning, scheduling and development of assets and scripts towards the realisation of interactive digital applications. The core skillset for this course is introductory and foundational to the development of proficiency and creativity in immersive systems applications. The basic skills and knowledge taught in this course (e.g. primitive modelling, C# scripting) will further develop throughout the programme as students incorporate 3D modelling and interaction programming as part of their creative process and exploration in their chosen disciplines.

**Course Aims**

This course aims to introduce students to core tools and techniques necessary for the development of Immersive Systems through the development of a foundational understanding of working with 3D software packages (e.g. 3DS Max, Blender) and modern game engines (e.g. Unity, Unreal). In this course, students are tasked with developing a simple interactive visualisation using simple primitive-based low-poly modelling and the implementation of the concepts of movement and animation through scripting. The overall aim of the project course is to familiarise students with creative processes in immersive systems development with a view to develop both professional and discipline practices, starting their journey as creative learners.

**Course Intended Learning Outcomes**

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

- Demonstrate knowledge of basic programming concepts
- Demonstrate knowledge of basic low poly 3D modelling and animation concepts
- Apply basic programming and 3D modelling skills and knowledge in the creation of a small interactive application

**Indicative Content**

The class material introduces students to the foundations of 3D modelling and immersive systems development.

**Indicative content includes:**

- Introductions to game Engine (e.g., Unity) and 3D modelling packages (e.g., 3DS Max)
- Understanding and interacting with 3D digital space
- Manipulating, transforming and modelling 3D primitives
- Exploring the 3D art pipeline
- Scripting simple interactions within a game engine (i.e., Unity)
- Exporting and importing assets within an immersive systems project

| **Description of Learning and Teaching Methods** |
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| The Programme is situated within a contemporary Art School education and self-directed studio studies and initiatives are a strong component of **individual student learning** and pathway of the discovery of self and the discipline of study. As such briefs tend to be opened to interpretation and require students to critically reflect on the nature of their creative response and individual learning.<br><br>**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.<br><br>**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.<br><br>This course is supported by a virtual learning environment tool (Canvas) for the dissemination, discussion and access to relevant course information, and signpost to other relevant teaching and learning platforms used by GSA. |

| **Indicative Contact Hours** | **Notional Learning Hours** |
|---|---|
| 20 | 200 |

| **Description of Formative Assessment and Feedback Methods** |
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| Students are supported in their learning through a range of formative assessment activities as they progress through the course. These include:<br>• Engagement in a range of peer review activities<br>• Regular feedback from tutors through in-class discussion and question and answer activities<br>• Written or verbal feedback from tutors on work in progress<br>• Formal review point half-way through the course |

| **Description of Summative Assessment arrangements** |
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| Summative assessment aligns with the learning outcomes of the course and is directly applicable to the student's individual and chosen pathway of study. Assessment is designed to support students to reflect upon their immersive systems practice, allowing them to not only demonstrate their learning through assessment, but also meaningfully apply their learning to their practice and developing their creative-practitioner identity. |

Students will be assessed on their ability to produce and deliver 3D assets according to a pre-defined brief and standards and incorporate their 3D assets within the production of a simple interactive application. Students will produce and deliver work using specified 3D Modelling packages and game engines for this course.
Submissions will be assessed and moderated in line with the Code of Assessment.
Reassessment opportunities where a student has not passed the course are outlined in the Code of Assessment.

| Description of Summative Assessment Method | Weight % | Submission week |
|---|---|---|
| 3D assets (folder) | 50 % | Week 8 |
| Interactive application (project + build) | 50 % | Week 8 |

| Exchange/Study Abroad | |
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| **Can this course be taken by Exchange/Study Abroad students?** | No |
| **Are all the students on the course taught wholly by distance learning?** | No |
| **Does this course represent a work placement or a year of study abroad?** | No |
| **Is this course collaborative with any other institutions?** | No |
| **If yes, then please provide the names of the other teaching institutions** | |

| Reading and On-line Resources |
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| The course indicative Reading and on-line resource list is accessible via Resource Lists.<br>This list will be reviewed and updated annually to reflect course content and subject developments. |