1. **Title of the module**
   3D for Visual Effects – Pro – PRSN5000

2. **School or partner institution which will be responsible for management of the module**
   Pearson College London / Escape Studios

3. **The level of the module (e.g. Level 4, Level 5, Level 6 or Level 7): Level 5**

4. **The number of credits and the ECTS value which the module represents:** 30 credits (15 ECTS)

5. **Which term(s) the module is to be taught in (or other teaching pattern):** Autumn

6. **Prerequisite and co-requisite modules**
   None

7. **The programmes of study to which the module contributes**
   MArt/BA Art of Visual Effects

8. **The intended subject specific learning outcomes**
   On successfully completing the module students will be able to
   1. The creative process involved in developing 3D assets for VFX
   2. The established theories, principles and tools involved in the creation of 3D content for use in a visual effects production
   3. The role of the different elements in the VFX production pipeline
   4. Evaluating established 3D solutions to respond to a given VFX brief
   5. Developing a response to a given brief that meets the creative and technical requirements
   6. Using established industry 3D tools and techniques to produce visually real assets for VFX
   7. Acting on feedback to improve their practice and providing constructive feedback on the creative and technical work of peers
   8. Communicating and presenting ideas in a technical and creative context

9. **The intended generic learning outcomes**
   On successfully completing the module students will be able to
   1. Designing, planning and delivering a project that meets a defined set of objectives within given time and resource constraints
   2. Developing their skills and knowledge through engagement with their peers and wider professional community

10. **A synopsis of the curriculum**
Following the introduction to visual effects in Stage 1, this module deepens the student's' knowledge and understanding of 3D. Through a series of guided tutorials, practical sessions, and studio time, and working with professional-standard software, students will gain a crucial and in-depth understanding of the tools and processes necessary to create digital objects that look real. Tutors will support with training and feedback, and the cohort will, as always, support each other in a collaborative learning environment.

In short, the aim of this module is to develop students’ ability to create photorealistic 3D assets to a professional standard using established industry software and techniques.

The aims are:

- To develop students' understanding of and expertise in 3D techniques for use in a professional VFX environment.
- To introduce students to the requirements of visual realism for the VFX process.
- To give students an understanding of VFX industry pipelines including creative development, 3D production and technical processes.

Keywords: 3D, VFX, TV, film

Outline syllabus:
- The theory and processes of professional 3D VFX pipelines
- The user interface (GUI)
- NURBS modelling
- Polygonal modelling
- UV mapping
- Texturing/surface techniques
- Materials
- Lighting
- Rendering

11. Indicative Reading List

   Recommended
   - *Production Pipeline Fundamentals for Film and Games*, Renee Dunlop, Focal Press (2014)

   Electronic
   - [http://www.awn.com/vfxworld](http://www.awn.com/vfxworld)
   - [http://www.artofvx.com/](http://www.artofvx.com/)
   - [http://www.fxguide.com/](http://www.fxguide.com/)
   - Escape Studios digital tutor resources

12. Learning and Teaching Methods
Learning and teaching takes place through four key modes of delivery. These provide a blend of technical skills training, exploration of theory and praxis, application in the studio, and self-directed study and development time. The balance differs depending on the type of module. As this is a Craft module, the balance is skewed in favour of Skills Sessions.

<table>
<thead>
<tr>
<th>Skills Sessions</th>
<th>c. 100 hrs</th>
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<tbody>
<tr>
<td>Tutorials</td>
<td>c. 20 hrs</td>
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<tr>
<td>Studio Time</td>
<td>c. 100 hrs</td>
</tr>
<tr>
<td>Self-Directed</td>
<td>c. 80 hrs</td>
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<td><strong>Total</strong></td>
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13. **Assessment methods**
13.1 **Main assessment methods**
Formative assessment will be provided throughout the module, both in terms of feedback on work in progress during Skills Sessions and Tutorials.

Summative assessment will be based on a Portfolio and Retrospective, and assessed using one or more of the Assessment Types (see Programme Specification).

**3D assets exercise (Formative, 0%)**
Create 3D assets in response to mock briefs. Present for formative feedback at a Studio Crit.

**VFX shot preproduction exercise (Formative, 0%)**
Create initial assets for their response to the VFX brief. Present for formative feedback at a Studio Crit.

**Assignment 1: Individual Portfolio (75%)**
Create a VFX shot incorporating 3D photo-real elements into a real image. Alongside the image development, build a portfolio of progress through the project. This portfolio should be in the form of an online blog and as well as containing written elements it should also contain images and video to help describe the development of the project. The aim is to provide detailed insight into the tools and techniques the students are learning as well as the creative and technical decisions they make. It is expected that they provide some critical analysis of their own work and draw some conclusions from it.

The portfolio will be assessed through a Portfolio Review.

**Assignment 2: Individual Retrospective (25%)**
The student will be required to use the learning outcomes as starting points for an enquiry into their work over the course of the module. How does their work relate to established theory and practice? How well did they do? What might they do differently next time? They will need to write their analysis, give themselves a grade based on the grading criteria, and present this for moderation and assessment.
13.2 Reassessment methods

14. **Map of Module Learning Outcomes (sections 8 & 9) to Learning and Teaching Methods (section 12) and methods of Assessment (section 13)**

<table>
<thead>
<tr>
<th>Module learning outcome</th>
<th>8.1</th>
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15. **Inclusive module design**

The Collaborative Partner recognises and has embedded the expectations of current disability equality legislation, and supports students with a declared disability or special educational need in its teaching. Within this module we will make reasonable adjustments wherever necessary, including additional or substitute materials, teaching modes or assessment methods for students who have declared and discussed their learning support needs. Arrangements for students with declared disabilities will be made on an individual basis, in consultation with the Collaborative Partner’s disability/dyslexia support service, and specialist support will be provided where needed.

16. **Campus(es) or Centre(s) where module will be delivered:**

Pearson College London / Escape Studios

17. **Internationalisation**

Visual Effects is by its nature an international discipline, and learning resources, materials and directed learning will include resources, examples and case studies from across the world.

18. **Partner College/Validated Institution:**

Pearson College London / Escape Studios
19. **University School responsible for the programme:**
   Engineering and Digital Arts

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Revision record – all revisions must be recorded in the grid and full details of the change retained in the appropriate committee records.

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<th>Date approved</th>
<th>Major/minor revision</th>
<th>Start date of the delivery of revised version</th>
<th>Section revised</th>
<th>Impacts PLOs (Q6&amp;7 cover sheet)</th>
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