Unit Title	Exploring Digital Film Technologies
FHEQ Level	4
Unit Code	DFP18105
Credit Value	30
Unit Type	Mandatory Subject

Learning Hours

Staff – Student Contact Hours		Independent Study Hours	
Classes	80	Independent Study	150
Supervised access to resources	10	Preparation for Assessment	20
		Unsupervised Access to Resources	40
Total			**300**

Unit Description

This unit builds on the introductory operational knowledge, understanding, skills, and competences gained in the Film Language and Technologies unit, extending your experience and introducing intermediate level skills in digital cinematography, post production, and in digital soundtrack construction.   It is designed to enhance constructional understanding from a Pathway perspective, and give you the chance to discover through experiment the relationship of these key tools to your discipline.

You will be introduced to the deeper conceptual, technical, and operational aspects of cinematography, post-production, and sound recording, with particular attention paid to their power to create meaning, emotion, and affect. You will be encouraged to explore and develop evolving working practices appropriate to the medium, including utilising diverse emerging tools (such as drones, and mounted mobiles such as the iPhone), a range of associated skills (such as lighting or visual effects) and technologies (such as mobile and internet streaming technologies, surround sound, and 360˚ recording), through practical project work, emulating work-based activity, and promoting new digital based workflows.

Study in this unit will offer cohort overview, and Pathway application, encouraging you to explore your chosen discipline through practical experiments in key areas of filmmaking.

The Five Principles underpin the Mindsets and Skillsets Manifesto and are the foundation upon which all course curriculum frameworks and unit specifications are based. The relevant Principles as stated below have been mapped against the Learning Outcomes relevant to each course unit and at each level (see Programme Specifications for full description of the Five Principles):

1. Cultivate / Where the individual thrives.
2. Collaborate / Where disciplines evolve.
3. Integrate / Where education engages industry.
4. Advocate / Where purpose meets practice.
5. Originate / creativity meets technology.

1

Unit Indicative Content

This unit is comprised of four areas:

- Camera / Lighting Technologies
  Quality Control; set-up cards; image sensors and sensor chips; gamma; chroma; RGB image signal; saturation; tonal range; gain; menu functions; white and black balance; ISO; 360˚; VR; digital workflows; LUTs; shot motivation; shooting for mobile technologies; shooting for streamed media and internet platforms; moving camera dynamics; basic physics of lighting; light and colour metering; using natural light; reflectors, gels, and coloured lighting; photometrics and colourmetrics

- Sound Technologies:
  Location sound recording techniques; microphone placement; radio mics; timecode sync; creating soundscapes; multi-tracking; audio dubbing and ADR; foley; spot effects; atmos tracks.

- Post Production Technologies:
  Digital workflows and practices: post production operations and protocols; tapeless workflows; SD/SSD card to laptop field editing; Quality Control and Media Asset Management (MAM) systems; post production roles and practices; digital post production effects.

- Contemporary practitioners and practices

Unit Aims

- Cultivate an initial set of creative and operational skills that will allow students to begin independently producing collaborative work quickly and effectively.

- Introduce students to a wide range of production tools, technologies, and associated skillsets, and enable the development of vocationally focused creative mindsets.

- Integrate knowledge and understanding of the basic technical principles with knowledge and understanding of creative principles central to their vocation.

- Enable students to reach a common level of knowledge, understanding, and practical skills, across Pathways, as a basis for further study and collaborations.

Unit Learning Outcomes

LO 1 Research/Inspiration

Demonstrate your capacity for information gathering techniques using a wide range of sources, providing visual, contextual and industry case-study research as appropriate.

Related Principle: ORIGINATE

LO 3 Development/Prototyping

Demonstrate a range of tests and solutions, informed by knowledge of the principles of the creative process.

Related Principle: INTEGRATE

LO 7 Employability

Evidence nurturing professional transferrable and employability skills, including the ability to manage time and work to clear briefs and deadlines, respond to set goals, and communicate effectively.

Related Principle: CULTIVATE

Learning and Teaching Methods

Cohort Lectures
Pathway Seminars
Practical Demonstration
Practical Workshops
Fortnightly Pathway Film Language Student Presentations
VLE Materials
Supervised Access to Resources
Independent Study
Self-directed research
Presentation of work in progress
Collaborative group work

Assessment methods and tasks

On-going Formative Assessment with be offered through regular Film Crits, on a group basis within an inter-Pathway group setting. A mid-term Pathway based Formative Assessment will focus on individual role development.

Summative Assessment will take the form of an individual Presentation, demonstrating research into and application of film language and technologies to the production of a portfolio of films, evidencing this with excerpts from research materials generated, and from the film productions.

Assessment tasks	Weighting (%) *(one grade or multi-grade unit)*
Individual Presentation of Research and Production Portfolio	100%

Indicative Assessment Criteria

Assessment criteria are the basis on which the judgment of the adequacy of the work is made. A more detailed assessment criteria will be specified in the brief.

Through the Individual Presentation of Research and Production Portfolio you will be assessed on:
- Level of ability to apply research and learning to a role within a film production (LO1)

- Degree of appropriateness in both creative and technical choices (LO3)
- Range of skillsets developed and applied to productions (LO7)

Essential Reading list

1. Ament, V. (2014) *Foley Grail: The Art of Performing Sound for Films, Games, and Animation*, Taylor & Francis, London
2. Brown, B. (2016) *Cinematography: Theory and Practice: Image Making for Cinematographers and Directors*, 3rd ed., Focal Press, Oxford
3. Dinur, E. (2017) *The Filmmaker's Guide to Visual Effects: The Art and Techniques of VFX for Directors, Producers, Editors, and Cinematographers*, Focal Press, Oxford
4. James, J. (2009) *Fix it in Post: Solutions for Postproduction Problems*, Focal Press, Oxford
5. Purse, L. (2013) *Digital Imaging in Popular Cinema*, Oxford University Press, Oxford