



Unit Title	Interactive Design and Creative Coding (blended)
FHEQ Level	Level 4
Unit Code	CLC20103
Credit Value	30
Unit Type	Subject

Learning Hours (blended)			
Staff – Student Contact Hours		Independent Study Hours	
Classes	70	Independent study	160
Supervised access to Ravensbourne resources	20	Preparation for assessment	50
Total		300	

Unit Description

This unit will provide you with an understanding of the design processes used in developing interactive media systems and experiences, whether this is for designing a website, a tangible interaction, virtual reality game, or interactive documentary. You will explore software development lifecycle, industry standard design and prototyping software and tools, while also conducting your own research and creating designs and prototypes that draw on the findings from your research.

The unit will develop students’ understanding of design practice methodologies and production workflows for interactive media.

This unit will introduce you to the technical elements of interaction which we come across on a regular basis in the shape of Mobile Applications, Games, Websites, Social Media and Augmented and Virtual worlds.

This unit will introduce you to concepts and techniques surrounding the production of motion graphics used in computer animations, special effects and web video etc. During the practical sessions, students will explore the aesthetic and narrative forms of these types of moving images, and will become familiar with Adobe After Effects software through the production of their own motion graphics.

The unit will challenge the creative and inquisitive minds and provide a fun and engaging atmosphere to flourish and nurture the student creativity.

The unit will also look at ethical implications of computing usage in the context of AR/VR and games technology where a user may have behavioural changes due to regular use of such technologies.

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.

Unit Indicative Content

The unit will look at creative media concepts and technologies.

- Programming and development using suitable tools for interactive media applications
- Contemporary interface, interaction, and product design methods
- Design for mobile platforms and consumer electronics
- Design process for digital products
- Personas and Goals
- Scenarios and Design Requirements
- Interactive Design Principles
- Designing considerations
- Platforms for interactive development
- Design for various platforms e.g. Desktop, Mobile
- Design and animate vector artwork
- Compose animations using HTML5 or a suitable tool
- P5.js, sketch.js, D3, three.js, C#, Java and Python
- Programming for the media devices
- Building a promotional video with text and images animated in 3D
- Design and code an interactive quiz for mobile devices
- Physical computing, wearables, display and sensing systems
- IoT and smart facilities
- Pattern creation and Image manipulation
- Interaction and Motion Graphics
- Ethical implications of AR/VR on Behaviour

Unit Aims

To develop an understanding of design practice methodologies and production workflows for interactive media

Understand the concepts of Interactive Media

Be able to create an interactive media application using suitable tools and techniques

Research emerging technologies and how they can be used for interaction

Be able to apply suitable technologies in the implementation of interactive media applications

Be able to identify ethical implications of technology in context

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 4 (Pre) Production

Identify, select and apply an appropriate selection of processes, materials and methods that inform creative and academic practice.

Related Principle: COLLABORATE

LO 5 Presentation /Storytelling for Influence

Evidence effective communication of projects, whether in visual, oral or written form.

Related Principle: ADVOCATE

LO 6 Critical and Creative Mindsets

Demonstrate enquiry into what makes good practice - both creatively and academically

Related Principle: ORIGINATE

Learning and Teaching Methods

This unit will be delivered using a combination of:

- Lectures / Seminars
- Online activities
- Self-directed independent study
- Peer learning, group discussion, guest speakers

Assessment methods and tasks

Assessment tasks	Weighting (%) (one grade or multi-grade unit)
Interim presentation	30%
Artefact final presentation	70%

Indicative Assessment Criteria

Evaluate design practice methodologies and production workflows for interactive media (LO1)

Research application of Interactive Media in a selected industry (LO1)

Apply the skills developed to create an interactive application using appropriate tools, languages or platforms (LO4, LO5)

Apply and evaluate suitable technologies in the implementation of interactive media applications (LO6)

Evaluate ethical implications of AR/VR in a context (LO6)

Essential Reading list

Cooper, A., Reimann, R., Cronin, D. and Noessel, C., 2014. About face: The essentials of interaction design. John Wiley & Sons.

Labrecque, Joseph, and Rob Schwartz. Learn Adobe Animate CC for Interactive Media: Adobe Certified Associate Exam Preparation. Adobe Press, 2016.

Recommended Reading List

Interdisciplinary Interaction Design: A Visual Guide to Basic Theories, Models and Ideas for Thinking and Designing for Interactive Web Design and Digital Device Experiences, James Pannafino, Assiduous Publishing, 2012.

Interactive Design: An Introduction to the Theory and Application of User-Centred Design, Pratt and Nunes, Rockport, 2012.