



MODULE SPECIFICATION

Part 1: Information			
Module Title	Creative Technologies Toolkit		
Module Code	UFCFJK-30-M	Level	Level 7
For implementation from	2018-19		
UWE Credit Rating	30	ECTS Credit Rating	15
Faculty	Faculty of Environment & Technology	Field	Computer Science and Creative Technologies
Department	FET Dept of Computer Sci & Creative Tech		
Contributes towards	Creative Technology [Sep][PT][Frenchay][2yrs] MSc 2018-19 Creative Technology [Sep][FT][Frenchay][1yr] MSc 2018-19		
Module type:	Standard		
Pre-requisites	None		
Excluded Combinations	None		
Co- requisites	None		
Module Entry requirements	None		

Part 2: Description
<p>Educational Aims: See Learning Outcomes</p> <p>Outline Syllabus: Indicative areas of study:</p> <p>Problem formulation, rapid software design, development prototyping methods for the creative technologies</p> <p>Audio and visual processing and programming for creative applications</p> <p>Interaction methods: graphical, tangible and gestural interaction, design and implementation</p> <p>Physical computing including sensor electronics, units and properties</p>

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Machine learning for creative applications

HCI in context: editing/offline, performance and installation

Traditional HCI methods; standards, benefits and limitations

Interaction mechanisms and programming responses

Tailoring interfaces for specific creative technologies purposes

Digital manufacturing techniques including 3D design, laser cutting and 3D printing

Teaching and Learning Methods: Workshop sessions constitute 6 hours / week (total 72 hours) scheduled across two days to facilitate cohort identity and team building.

Self-directed independent learning will be required outside of scheduled sessions.

Contact time: 48 hours

Assimilation and development of knowledge: 148 hours

Demonstration preparation: 20 hours

Assignment preparation: 84 hours

Total study time: 300 hours

Scheduled learning:

Learners will be introduced to theoretical and conceptual aspects of the module via lecture, which will be put into practice in subsequent practical sessions/workshop scheduled twice weekly, taught and supported by module staff.

Following the formal taught content, learners will engage in collaborative workshop sessions for the initial development of project ideas for assessment.

Academic writing sessions will be scheduled at the later stages of the taught material to support learners in the development of the assignment submission. This submission will constitute the development of an academic manuscript, which will be marked prior to submission at a national or international conference specialising in the creative technologies.

Independent learning:

Learners will be expected to read recommended materials in preparation for each session. Additional self-directed study in the form of wider reading and practical work to complete exercises, extend ideas, and develop further understanding independently of timetabled sessions.

The assignment will require students to complete additional unsupervised learning.

Part 3: Assessment

The assessment will be used to assess learners' abilities to apply skills and embed theory within practice through the development and communication of creative technology systems.

This will require students to assemble and submit a portfolio of diverse creative technologies systems. The demonstration will be used to establish learners' knowledge and comprehension of the module content, delivered in taught sessions and reinforced through reading materials.

Formative assessment will be provided as part of the practical sessions. Individual feedback will be provided on the assignment and demonstration. Assessment criteria will be supplied with the assignment and demonstration specification.

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First Sit Components	Final Assessment	Element weighting	Description
Written Assignment - Component B		75 %	Assignment 1 (individual work)
Practical Skills Assessment - Component A	✓	25 %	Practical demonstration (25 minutes)
Resit Components	Final Assessment	Element weighting	Description
Written Assignment - Component B		75 %	Assignment 1 (individual work)
Practical Skills Assessment - Component A	✓	25 %	Practical demonstration (25 minutes)

Part 4: Teaching and Learning Methods		
Learning Outcomes	On successful completion of this module students will be able to:	
		Module Learning Outcomes
	MO1	Create, select and apply software techniques, libraries, data structures, classes and algorithms appropriate for the development of creative technology applications
	MO2	Design, develop, test and evaluate creative computing solutions to satisfy design specifications by integrating modern visual, audio and interactive software and hardware technologies
	MO3	Recall, discuss, and apply sonic, visual and general human-computer interaction theories and methods within a creative technologies context
	MO4	Employ digital manufacturing techniques to design, realise and evaluate prototypes
	MO5	Classify, contrast, employ and rate a range of tools and frameworks relevant to the lifecycle of a collaborative creative technologies project
	MO6	Assemble and present a portfolio of creative technology projects, demonstrating versatility across a range of platforms, devices, users and contexts
Contact Hours	Contact Hours	
	Independent Study Hours:	
	Independent study/self-guided study	252
	Total Independent Study Hours:	252
	Scheduled Learning and Teaching Hours:	
	Face-to-face learning	48

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	Total Scheduled Learning and Teaching Hours:	48
	Hours to be allocated	300
	Allocated Hours	300
Reading List	<i>The reading list for this module can be accessed via the following link:</i> https://uwe.rl.talis.com/modules/ufcfjk-30-m.html	