



## MODULE SPECIFICATION

Part 1: Information			
Module Title	Software Development for Audio		
Module Code	UFCF94-15-3	Level	Level 6
For implementation from	2019-20		
UWE Credit Rating	15	ECTS Credit Rating	7.5
Faculty	Faculty of Environment & Technology	Field	Computer Science and Creative Technologies
Department	FET Dept of Computer Sci & Creative Tech		
Module type:	Standard		
Pre-requisites	None		
Excluded Combinations	None		
Co- requisites	None		
Module Entry requirements	None		

Part 2: Description
<p><b>Educational Aims:</b> See Learning Outcomes.</p> <p><b>Outline Syllabus:</b> Object oriented design and programming. Advanced audio data processing (e.g. frequency domain techniques, large processing structures, audio file formats). Large program design, structure and implementation styles. Efficiency, optimisation, profiling, structural techniques, error handling, defensive programming, source management, issue tracking.</p> <p><b>Teaching and Learning Methods:</b> Theoretical and conceptual aspects of the module will be introduced by lecture on a weekly basis and, where appropriate, contextualised with practical demonstrations of application. Relevant reading material and sections from the course text should be read in preparation for each lecture.</p> <p>Learners will apply the conceptual elements of taught material in weekly practical sessions where abilities in problem solving and implementation surrounding audio technology concepts will be developed. Learners are required to complete exercises, extend ideas, and develop further understanding independently of the timetabled sessions.</p>

## STUDENT AND ACADEMIC SERVICES

The assignment will require students to complete additional unsupervised learning. It should be anticipated that the majority of the associated study time will be biased towards the assignment deadlines.

Contact time: 36 hours

Assimilation and development of knowledge: 74 hours

Exam preparation: 10 hours

Coursework preparation: 30 hours

Total study time: 150 hours

### Part 3: Assessment

The presentation will be used to establish learners' understanding of the module content as described in lectures and reading materials.

The assignment will be used to assess learners' practical skills in the application of music and audio technology systems. This will involve demonstrating an ability to create an extended piece of work beyond the examples seen in lectures and practicals.

Formative assessment will be provided as part of the practical sessions. Individual feedback will be provided on the assignment and presentation.

Assessment criteria will be supplied with the assignment specification and in example exam papers.

First Sit Components	Final Assessment	Element weighting	Description
Practical Skills Assessment - Component B	✓	75 %	Assignment 1 (individual work)
Presentation - Component A		25 %	Presentation (15 minutes)
Resit Components	Final Assessment	Element weighting	Description
Practical Skills Assessment - Component B	✓	75 %	Assignment 1 (individual work)
Presentation - Component A		25 %	Presentation

### Part 4: Teaching and Learning Methods

Learning Outcomes On successful completion of this module students will achieve the following learning outcomes:

Module Learning Outcomes	Reference
Interpret, formulate and implement object oriented software designs and programs as solutions to music and audio related problems	MO1
Create, evaluate and select libraries, data structures, classes and algorithms appropriate for the development of audio and music applications	MO2
Demonstrate effective operation of a range of development tools relevant to the development of software to a professional standard	MO3
Classify, evaluate and communicate software design concepts relevant to audio and music applications	MO4

## STUDENT AND ACADEMIC SERVICES

Contact Hours	<b>Independent Study Hours:</b>	
	Independent study/self-guided study	114
	<b>Total Independent Study Hours:</b>	114
	<b>Scheduled Learning and Teaching Hours:</b>	
	Face-to-face learning	36
	<b>Total Scheduled Learning and Teaching Hours:</b>	36
	<b>Hours to be allocated</b>	150
	<b>Allocated Hours</b>	150
Reading List	<p>The reading list for this module can be accessed via the following link:</p> <p><a href="https://uwe.rl.talis.com/modules/ufcf94-15-3.html">https://uwe.rl.talis.com/modules/ufcf94-15-3.html</a></p>	

### Part 5: Contributes Towards

This module contributes towards the following programmes of study: