

Coding for Audio

Module Information

2022.01, Approved

Summary Information

Module Code	6540STE
Formal Module Title	Coding for Audio
Owning School	Engineering
Career	Undergraduate
Credits	10
Academic level	FHEQ Level 6
Grading Schema	40

Teaching Responsibility

LJMU Schools involved in Delivery
LJMU Partner Taught

Partner Teaching Institution

Institution Name
Liverpool Institute for Performing Arts

Learning Methods

Learning Method Type	Hours
Tutorial	10
Workshop	30

Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
JAN-PAR	PAR	January	12 Weeks

Aims and Outcomes

Aims	This module is designed to provide an introduction to object oriented-coding with a particular emphasis on developing audio applications and plug-ins. It builds on core aspects of DSP covered at Levels 4 and 5, but positions this within the context of lower level development tools such as X-Code
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After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Combine real-time signal processing and software design concepts to produce a software plug-in compatible with commercial audio host applications
MLO2	2	Solve problems to generate bug-free code
MLO3	3	Demonstrate an understanding of object oriented programming techniques and development tools

Module Content

Outline Syllabus	Compilers; basic program structure; variables and types; writing a simple program with user I/O Operators, statements and flow control; function; scope Object Oriented principles File I/O Version Control; class inheritance, basic debugging techniques, enumeration Pointers and references; dynamic memory; circular buffers; offline audio processing Using Audio Units GUI considerations
Module Overview	
Additional Information	Jon Thornton is the Module Leader (j.thornton@lipa.ac.uk)

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Report	Practical Coursework	100	0	MLO1, MLO2, MLO3

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
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Partner Module Team

Contact Name	Applies to all offerings	Offerings
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