

Advanced Live Sound

Module Information

2022.01, Approved

Summary Information

Module Code	6532STE
Formal Module Title	Advanced Live Sound
Owning School	Engineering
Career	Undergraduate
Credits	20
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
Lecture	18
Tutorial	5
Workshop	36

Module Offering(s)

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

Aims and Outcomes

Aims	This module aims to provide the learner with the opportunity to extend understanding and knowledge gained in levels 4 and 5 and apply this in a wholly practical context. Much of the delivery of the module is built around providing the technical input to major performances and shows. In addition, a number of alternative, advanced technical approaches will be explored which will enable the student to achieve a higher standard and work more efficiently.
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After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Demonstrate a detailed knowledge and skilled use of speaker arraying technologies/methodologies, advanced live digital console function and applications, automation, show control and digital audio distribution/networking – design and deployment
MLO2	2	Independently design, rig and operate a medium to large-scale sound reinforcement system to support a specific production
MLO3	3	Undertake the organisational and technical roles and responsibilities of Sound Designer, Production Sound Engineer and Sound Number 1 and 2
MLO4	4	Apply professional fault-finding skills and solve problems/apply solutions to complex/challenging live sound situations

Module Content

Outline Syllabus	Large-scale event speaker system design and directivity control Including line array theory and application, low frequency dispersion and management, system response prediction and modelling, processing and control Live Sound Digital Mixing consoles – Advanced features to support a variety of live sound production environments, working with recall and automation, remote pre-amps and mix layers Digital audio transmission and networking for live sound applications Audio infrastructure and network planning, design and implementation; varying approaches based on system/production requirements Communications Comms requirements and systems for large-scale events; RI and matrixed solutions; cue lights, video systems and distribution Advanced Monitoring Techniques Options and solutions for complex and challenging live sound monitoring requirements using wired and wireless systems and automated devices for increasing GBF Advanced RF Working with large-scale RF systems for live events including frequency planning and management; similarities and differences between analogue, digital and hybrid RF systems Advanced System measurement and Optimisation Advanced theory and practical application of SMAART for system measurement and optimisation including phase response and alignment Show Control and Automation Incorporating timecode and console automation in to live performance, automation of image shift and sound effect animation in live sound multi-channel applications
Module Overview	
Additional Information	Chris Layton is the Module Leader (c.layton@lipa.ac.uk)

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Practice	Practical Project Work	85	0	MLO1, MLO2, MLO3, MLO4

Portfolio	Portfolio	15	0	MLO1, MLO2, MLO3
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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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