Module Specification

Summary Information

Module Code	5602STE
Formal Module Title	Live Sound 2
Career	Undergraduate
Credits	30
Academic level	FHEQ Level 5
Module Pass Mark	40

Learning Methods

Learning Method Type	Hours
Lecture	30
Practical	12
Workshop	30

Module Offering(s)

Start Month	Duration
September	28 Weeks

Aims and Outcomes

Aims	This module aims to build on and develop the skills and techniques learned in Live Sound 1 addressing larger sound reinforcement systems in both fixed installations and portable situations. It also introduces the learner to the specific requirements of sound-reinforcement and sound design in theatrical and other non-musical contexts. More advanced technologies are introduced, such as the use of RF systems for microphones and monitoring, active speaker management and measurement systems, advanced applications of live sound digital mixing consoles, introduction to digital audio networking and the use of sophisticated DSP based systems for processing and show control.

Learning Outcomes

After completing the module the student should be able to:

Code	Description

MLO1	Design, rig, optimize and operate medium to large sound reinforcement systems appropriate to a given brief.
MLO2	Demonstrate a detailed knowledge of the function and use of digital speaker management and measurement systems, RF mics, wired and wireless monitoring and communication systems.
MLO3	Identify, diagnose and resolve faults in complex sound reinforcement systems taking into account relevant safety requirements including power distribution.
MLO4	Critically evaluate their process and product including both technical and non-technical influences.

Module Content

Outline Syllabus
Advanced Speaker Systems Multiple speaker arrays – distributed approaches to reinforcement; active speaker management systems – crossover points and responses, compression and protection; planning, rigging and flying techniques for loudspeakers; time alignment and imaging. **Advanced System Design** Working with mix matrixes; analogue and digital live sound consoles; digital audio networking basics; DSP based system processing – advantages and disadvantages, key components, software building blocks, building DSPbased system processing profiles, remote monitoring; power distribution – single and multi-phase, distribution and conditioning units, avoiding earth loops. **RF Technology and Communications Systems** Basic principle of RF transmission and reception; aerial types and uses; frequency planning, management and licensing; inter-modulation and how to avoid it; RF distribution and head amplification; working with radio microphones – capsule types and characteristics, mic placement strategies and techniques with head-worn microphones; working with In-Ear Monitoring Systems; Communication systems for live sound - design and implementation. **Theatre Sound** Similarities and differences in theatrical reinforcement requirements; protocols for working in theatre; planning and producing documentation. **System Measurement and Tuning** Principles of measurement – single channel spectrum analysis vs. dual-channel measurement principles; using software and hardware tools for measurement.
Additional Information
This module is a pre-requisite to undertake 6602STE Advanced Live Sound.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Learning Outcome Mapping
Practice	Controlled Practical Project	50	4	MLO1, MLO2, MLO3
Portfolio	Technical Portfolio and Group	20	0	MLO4
Practice	Show Allocation Role	30	0	MLO1