Pearson BTEC Levels 4 and 5 Higher Nationals specification in Music

Contents

Unit 1: Accessible Music Technology

Unit code: A/601/1348

Level: 4

Credit value: 15

Unit aim

This unit enables learners to develop an understanding of and an open-minded approach to available and developing technology in music. This includes inclusivity developments using current technology.

Unit abstract

As music technology develops, more devices and techniques evolve to aid accessibility to this technology. It is vital that any aspiring musician working with western art forms keeps abreast of its possibilities, its advantages and the breadth of its capabilities and influence.

Music creation has been revolutionised by cheaper high quality equipment. The range (from 'traditional' notation packages and high quality audio applications to experimental and esoteric instruments and computer-based devices) gives musicians a wealth of possibilities. New technological developments can inspire new ideas. Also music distribution and marketing via developments in technology have given creators more control of their own material.

All western genres and styles are dependent on the use of technology. All cultures make use of technological opportunities, even though the extent of creative influence will vary.

Inclusivity opportunities are an important feature. Expanding possibilities due to the development of technology is an exciting opportunity. Many such devices are accessible to the point of replacing mainstream appliances and achieving universal appeal.

This unit requires the learners to investigate the use and development of music technology. It looks at the many 'everyday' devices and their use and gives learners the opportunity to investigate cutting edge innovation and development.

Learning outcomes

On successful completion of this unit a learner will:

1 Understand current dedicated hardware technology for creating an accessible computer environment

2 Understand current dedicated software technology for creating an accessible computer environment

3 Understand alternative uses of hardware MIDI equipment for wider accessibility in music making

4 Be able to facilitate the capabilities of electronic music for others using accessible music creation processes.

Unit content

1 **Understand current dedicated hardware technology for creating an accessible computer environment**

Alternative input devices: controllers e.g. replacement keyboards, overlay design, over- and under-sized keyboards, alternative mouse devices, head mouse, switch interfaces, limited movement sensory devices

Switches: types e.g. button switches, support clamps, sound detecting switches, suck/blow switches, infrared switches, muscle sensing switches, motion triggers, heat sensors

2 **Understand current dedicated software technology for creating an accessible computer environment**

Software control: systems e.g. onscreen keyboards and keyboard emulation software, mouse function software, software switch interfaces and mouse replacement applications, operating system native accessibility, visual settings, key functions

Software control via keystrokes: systems e.g. integration of commercially available application's keystroke commands with onscreen virtual keyboards, use with intelligent keyboards and customised overlays

3 **Understand alternative uses of hardware MIDI equipment for wider accessibility in music making**

Particular devices and sensors: triggering e.g. movement to MIDI converters, light to MIDI converters, techniques for triggering, specifications, programmability, quality of integration with the rudiments of music language, custom and self momentary/latching switches, proximity switches, MIDI controllers, portable and mobile devices

MIDI considerations: system e.g. integration with MIDI, connections into MIDI set-up, ergonomics, user-friendliness, specialist use of MIDI controller messages, MIDI programming on device

Creative integration and implementation: context e.g. using with mainstream music technology, use of pre-programmed set-ups, programming user-defined set-ups, ease of use of devices; speciality areas e.g. rhythm, melody, harmony

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4 **Be able to prepare accessible music technology equipment for others to facilitate the music creation processes**

Composition using custom software: creativity e.g. recording of MIDI data, note entry techniques, switch control, scanning facilities, step time entry, real time entry, sequence construction, editing of MIDI data, various editing techniques, track management, software features, integration of external devices

Performance using custom software: control e.g. solo playing, ensemble playing, triggering techniques of MIDI data, switch control, remote MIDI control and triggering, control over external MIDI device(s), editing via external MIDI control

Expanding the MIDI environment: adapting and integration of music production applications into accessible environment e.g. virtual decks, loop-based applications, VST instruments, VST effects, control of performance-enhancing devices

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand current dedicated hardware technology for creating an accessible computer environment	1.1 explain the features and opportunities afforded by current alternative input devices for increasing accessibility to the computer environment 1.2 evaluate the suitability of various switches and switch types for use as alternative input interfaces
LO2 Understand current dedicated software technology for creating an accessible computer environment	2.1 evaluate emulation software for enhancing the accessibility of the computer environment 2.2 assess software control over commercially available application's keyboard shortcuts
LO3 Understand alternative uses of hardware MIDI equipment for wider accessibility in music making	3.1 assess the suitability of a range of MIDI-based hardware devices within accessible music production 3.2 evaluate the MIDI integration of a range of accessible music production hardware devices 3.3 assess uses of mainstream hardware devices in accessible music production
LO4 Be able to prepare accessible music technology equipment for others to facilitate the music creation processes.	4.1 show awareness of music composition techniques when preparing accessible music technology 4.2 demonstrate optional performance uses for a range of MIDI equipment which enhance accessibility 4.3 use the MIDI environment to facilitate music making.

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Guidance

Links

This unit links with:

- *Unit 9: Community Music Projects*
- *Unit 12: Computer Music Composition and Production*
- *Unit 13: Computer Music Systems*
- *Unit 33: Music Performance Studies*
- *Unit 36: Music Technology*
- *Unit 41: Planning for Public Performance*
- *Unit 42: Preparation, Process and Production in the Creative Arts.*

Essential requirements

It is highly recommended that the theoretical knowledge gained should be implemented practically through the learner working as a facilitator in a group workshop situation working towards a performance (see *Links*), or perhaps working on a one-to-one basis involved in composition with a client. In a situation where these opportunities are difficult to achieve, it should be possible to simulate these situations within the year group. This unit must be delivered to learners who already have a firm grasp of the MIDI specification and protocol. It is very much a cross-disciplinary unit, and could combine knowledge of performance, community arts working and technology.

As well as access to current mainstream music technology equipment, the learner must have access to the specialised technology – hardware and software – mentioned in the *Unit content*. In addition, sufficiently large areas will be required for group rehearsal situations.

Employer engagement and vocational contexts

Evidence for the practical elements of this unit can be generated from performance situations, rehearsals, workshops etc. This evidence could take the form of a video showing practical use of the technology in question, audio recordings of performances/compositions, reports showing system set-ups and diagrams, recorded MIDI data and files, software files and performance set-up files and data etc. Evidence for the more theoretical elements could take the form of research documents, evaluative reports etc.

Community groups with local and national specialist trusts would provide learners with an invaluable opportunity to research these disciplines and the equipment in practice.

Unit 2: Acoustics

Unit code: J/601/1353

Level: 5

Credit value: 15

Unit aim

This unit aims to enable learners to take the theory of acoustics into practice by exploring situations where the knowledge can be applied to real-life acoustic issues and phenomena.

Unit abstract

Understanding acoustics can have a far-reaching and positive impact on musical life and can resolve many of the issues musicians face throughout their careers. Understanding the fundamentals of acoustics is valuable for a musician. Being able to explain how the ear works or why a performance space is unsuitable for acoustic music is of value when discussing budgets and feasibilities with promoters and agencies. An appreciation of the tuning systems across musical cultures will save time when working with world musicians and tuning up for a high-stakes recording session.

This unit consolidates knowledge of the physics of sound and applies it qualitatively and quantitatively to musical instruments, musical systems and the environments where music is performed, recorded and configured. The basic physiology of hearing and psychology of sound perception are also considered to allow a practical understanding of acoustics that can be applied to real-life situations.

By looking at musical instruments and spaces, learners will make the connection between sound source and listener and will be able to appraise any acoustic situations which may compromise the experience of listening to music, and make suggestions.

This unit explores the areas of sound perception that include surround sound and the emerging technologies that are available to artists based on psycho-acoustic principles.

Learners will also look at the materials that are available to professional and amateur studio designers, to help rectify acoustic shortcomings.

Learning outcomes

On successful completion of this unit a learner will:

1 Understand the physical properties of sound waves

2 Understand how the timbre, scale and intonation systems of musical instruments relate to the harmonic series

3 Understand the physiological and perception processes involved in hearing

4 Be able to measure the behaviour of sound in physical spaces

5 Understand how to control sound in physical spaces.

Unit content

1 **Understand the physical properties of sound waves**

Waveforms: in air; in mechanical structures; in electrical circuits; simple harmonic motion; sine and cosine curves; phase; complex waves; superposition; beats

Physics of sound: transmission of energy; properties of a medium; speeds of sound; wavelength; cycle time; acoustical impedance; directivity; sound pressure measurements; measuring devices; standards and weightings

2 **Understand how the timbre, scale and intonation systems of musical instruments relate to the harmonic series**

Theoretical basis: the harmonic series; deviations in real practice; non-harmonic partials

Instrument acoustics: sound generator/resonator; standing waves; string and pipe modes; membranes; idiophones; timbre; transients; Fourier analysis

Scales and temperaments: historical and non-European scale systems; theoretical basis in the harmonic series; consonance and dissonance; frequency ratios and cents; equal temperament

3 **Understand the physiological and perception processes involved in hearing**

The ear: structure and function; range of hearing and pitch discrimination; non-linearity and combination tones; tinnitus; ear damage; safety levels and laws; the implications of legislation on performance and venue design

Sound perception: brain processing of directional and temporal information; the stereo illusion and other illusions; differences and similarities in the processing of speech and music

4 **Be able to measure the behaviour of sound in physical spaces**

Space acoustics: measurement; room constant; intelligibility; sound insulation; spectrum analysis; monitor and speaker equalisation

Performance spaces: ideal acoustic characteristics for various performances or recording situations; designing and modifying spaces; acoustic treatment; architectural acoustics

5 **Understand how to control sound in physical spaces**

Boundaries and objects: sound transmission and reflection; diffraction of sound waves; standing waves

Monitoring and control rooms: ideal acoustical characteristics for monitoring and mix-down facilities; designing and acoustic treatment of spaces; qualitative and quantitative approaches

Materials: calculations and practical consequences of absorption coefficients and reverberation time; panels; screens; tiles; traps; booths; diffusers; sound insulation

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Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand the physical properties of sound waves	1.1 analyse the waveforms which constitute sound in a range of media 1.2 explain acoustic phenomena in terms of the physics of sound and apply appropriate formulae to predict parameters
LO2 Understand how the timbre, scale and intonation systems of musical instruments relate to the harmonic series	2.1 explain the mathematical basis of the harmonic series and the consequences of practical deviations from the theoretical model 2.2 relate the sounds produced by musical instruments to their physical form and instrument acoustics 2.3 interpret the development of scales and temperaments in respect of the harmonic series, musical practices and the physical constraints of musical instruments
LO3 Understand the physiological and perception processes involved in hearing	3.1 explain the processes which convert changes of air pressure to nerve impulses in the ear 3.2 analyse the consequences for hearing of the ear's physiology 3.3 explain psycho-acoustic phenomena with reference to the processes of sound perception
LO4 Be able to measure the behaviour of sound in physical spaces	4.1 use formulae to determine acoustic quantities and explain the practical consequences of space acoustics 4.2 evaluate performance spaces for various musical uses including practical means of sound insulation and acoustic modification
LO5 Understand how to control sound in physical spaces.	5.1 analyse the interactions of sound with physical boundaries and objects 5.2 assess the acoustic requirements of monitoring and control rooms and relate these to practical designs 5.3 explain the acoustic properties of materials used in mitigating sound recording issues.

Guidance

Links

This unit links with:

- *Unit 35: Music Studio Production*
- *Unit 43: Principles of Musical Sound*
- *Unit 49: Sound Creation and Manipulation*
- *Unit 52: Studio Recording and Engineering.*

This unit builds on the knowledge gained in *Unit 43: Principles of Musical Sound,* but whereas the former is dealing with an understanding of the principles, this unit focuses on the mathematical and quantitative analysis of sound and environments.

This unit also has links with the following National Occupational Standards:

Technical Theatre

- CPD1 Improving your skills
- CPD2b Ensure that you and your team keep up to date with the technical and production areas of the live arts
- HS1 Working safely
- TP8.4 Setting up and checking sound equipment
- TP5.6 Sourcing sound equipment

Live Events and Promotion

- LE7 Identify suppliers of materials and equipment for the running of a live event.

Essential requirements

Learners must have experience of a variety of performance spaces and recording facilities. It will be helpful if they can perform acoustic measurements in some of these. This requires calibrated microphones, dB meter, frequency meter, frequency sweep generator and response plotter.

For making sound visual, signal generators and an oscilloscope are essential and a frequency spectrum analyser or fast Fourier transform software are highly desirable. Other software which demonstrates wave motion is desirable, though the traditional wave tank, slinky spring and piece of string retain a physical immediacy.

Learners must have access to a range of musical instruments to include at least one string, reed, flute type and brass.

Centres should consider computer software-based alternatives to the above, where appropriate.

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Employer engagement and vocational contexts

Although this unit explores the fundamental science and mathematics that underpin music and sound, it is essential that the unit remains relevant, approachable and practical. All study should be related to the learner's own practical experience in the studio or in music making. There should be scope for them to explore issues through their research, contribute their ideas and develop their reasoning skills.

Informal performance spaces throughout the community are ripe for acoustic analysis and treatment. Working with local architects and local authority planning departments should open up exciting learning opportunities, for example where facilities such as schools are being developed, planned and built.

Unit 3: Applied Music Production Techniques

Unit code: R/601/1517

Level: 5

Credit value: 15

Unit aim

The aim is to enable learners to research and recreate accepted and innovative studio production techniques before developing a personal approach to music production.

Unit abstract

As with many arts-related media, to explore and further new ideas in music production it is essential to review and understand successful techniques. Studio production is regarded as being as creative as the music itself and often a song will be arranged, shaped and defined within studio production.

This process can often make the difference between success and failure, separating the ordinary from the innovative. Whilst the use of technology has always contributed to studio production, the way in which it is used can also greatly influence the outcome of any final product.

This unit explores successful production techniques and styles, reflecting on both the engineer's and the producer's creative skills, as well as the creative use of technology. Production techniques and styles can be achieved through both research and critical listening; these can also be applied to reflect current trends within popular as well as other less mainstream music production.

The unit then develops these ideas on a practical level, with the learner given the task of employing a specific, previously recognised production style before developing and creating their own production techniques.

Learners will collect ideas, techniques, tools and creative inquisitiveness that will become their 'toolbox' for a successful career as a producer in the music world.

Learning outcomes

On successful completion of this unit a learner will:

1 Understand significant developments in music production techniques

2 Understand current developments within music production practice

3 Be able to implement specific recognised production techniques appropriate to genre, era and style

4 Be able to implement and develop creative production techniques.

Unit content

1 **Understand significant developments in music production techniques**

Landmarks: personalities e.g. producers, artists, engineers; artefacts e.g. definitive recordings, equipment

Production techniques: actions e.g. engineering techniques, audio processing, studio techniques, mixing techniques, compositional and arrangement techniques

Technology: equipment e.g. recording systems, analogue versus digital systems, sound quality, synthesis, sampling, development of music instrument technology

2 **Understand current developments within music production practice**

Production methods: tools e.g. compositional developments, production techniques unique to genre, processes, sampling, sequencing, sound sources, vocal approaches

Technology: equipment e.g. current musical instrument technology, use of digital recording systems, computer-based processing techniques, developments in audio software and hardware

Mastering and distribution: standards e.g. mastering, CD, DVD, file formats; traditional and alternative distribution methods; the internet e.g. iTunes store

3 **Be able to implement specific recognised production techniques appropriate to genre, era and style**

Sources: sound e.g. appropriate microphone selection and placement, selection of instrumentation and musicians, voicing, arrangement

Treatment: sound e.g. use of recording techniques appropriate to chosen style including studio processors, compression, delay-based effects, ambience, reverberation, overall audio quality

Mixing: tools e.g. use of mixing techniques appropriate to chosen style, quality issues, balance, stereo techniques, depth, timbre, interest

4 **Be able to implement and develop creative production techniques**

Accepted techniques: approaches e.g. engineering approaches, microphone techniques, effects processing, mixing techniques, traditional and/or modern instruments, professional standards, digital editing, sampling, looping, time-stretching, pitch correction/shifting, plug-ins

Genre specific: idiomatic e.g. instrumentation, style, rhythmic approaches, melodic approaches, use of technology, arrangement, production techniques

Innovation: innovation e.g. approaches to arrangement and recording, technological advances, use of computer software and hardware

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Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand significant developments in music production techniques	1.1 analyse landmark developments in the production of music 1.2 assess changing approaches to music production techniques 1.3 assess the impact of the technological developments in both recording and instrumentation upon the production of music
LO2 Understand current developments within music production practice	2.1 evaluate the methods of contemporary music production and arrangement methods 2.2 evaluate opportunities offered by current technological developments 2.3 assess current and emerging technologies in the mastering and distribution of musical products
LO3 Be able to implement specific recognised production techniques appropriate to genre, era and style	3.1 select and justify appropriate textures and instrumentation techniques used to typify and produce selected genres 3.2 select and justify external processing and editing techniques used to typify and produce selected genres 3.3 assess the approaches needed to produce a recording to a chosen production style 3.4 produce a recording to a chosen production style
LO4 Be able to implement and develop an individual creative production technique.	4.1 develop and justify a personal 'toolbox' of accepted music production techniques 4.2 apply recording techniques and skills in order to produce a genre-specific musical product 4.3 apply mixing techniques and skills in order to complete the musical product.

Guidance

Links

This unit links with:

- *Unit 10: Composing for Film and Television*
- *Unit 28: Music Composition Techniques*
- *Unit 34: Music Production Analysis*
- *Unit 35: Music Studio Production*
- *Unit 48: Songwriting Techniques and Skills.*

Essential requirements

Successful portfolio building requires access to comprehensively equipped studio environments, including a sound recording area and a wide range of microphones and signal processing equipment.

Computer-based resources must reflect current practice. Learners will require access to up-to-date technology appropriate to their individual interests and musical direction. Resources must be available to develop suitable sample and synthesiser libraries.

Employer engagement and vocational contexts

Learners should be encouraged to find out about the recording facilities in the local area and to visit them. Any session observation or work experience gained is of benefit to learners. The opportunity to speak to studio personnel, either in the studio or within the centre's learning facilities, is also of value.

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Unit 4: Audio Electronics

Unit code: Y/601/1521

Level: 4

Credit value: 15

Unit aim

The aim of this unit is to enable learners to use fundamental electronics skills and understanding to cope with day-to-day electronic issues that arise in a music production environment.

Unit abstract

Life as a professional musician is no longer simply a case of maintaining a musical instrument and performing a prepared notated piece of music. All musicians across all styles of music come into regular contact with technology, from simple handheld electronic tuners to fully digital converged recording workstations. This technology is largely robust, but simple and irritating issues arise on a regular basis and musicians are now expected to be the first line in solving their own problems rather than relying on white-coated engineers and expensive maintenance personnel.

The unit does not seek to provide a comprehensive course in electronics but builds on the enthusiasm of musician producers and music technologists to remove their fear of electronics and cope with the everyday situations that will inevitably arise in practice.

It will give learners the confidence to know when help from fully trained and qualified service personnel is required and the expense of their call-out is justified.

This unit gives learners an understanding of how basic electronic circuits work. It develops practical skills in soldering connectors and building simple circuits, and practical experience in the use of test equipment. It also gives learners the opportunity to develop safe and effective habits of practical working as well as providing a logical approach to understanding and testing the types of circuits commonly encountered in the music production industry.

Learning outcomes

On successful completion of this unit a learner will:

1 Understand safe and effective workshop practice

2 Understand the function and use of passive electronic components

3 Understand the function and use of active electronic components

4 Be able to build working examples of audio circuits.

Unit content

1 **Understand safe and effective workshop practice**

Health and safety: physical risks e.g. electric shock, burns; chemical and particulate hazards; regulations and habits of safe working; effective first aid; COSHH regulations and hazard control

Electronics fabrication: component selection and identification; neat and effective soldering of leads and components; breadboards and prototyping; designing and making printed circuit boards

Test equipment: the use of multimeters and oscilloscopes to perform tests of function; signal tracing; logical fault finding and rectification

2 **Understand the function and use of passive electronic components**

Electronic theory: electrons and current; EMF (electromotive force); voltage; resistance; capacitance; inductance

Passive components: resistors; capacitors; coils; transformers; diodes; characteristics and uses of passive components

Passive networks: laws of combination; simple passive circuits; power supplies; filters; practical applications

3 **Understand the function and use of active electronic components**

Active components: valves; transistors; operational amplifiers and other integrated circuits; characteristics and uses of active components

Active networks: transistor configurations; simple amplifier stage; operational amplifier configurations; feedback; active filters

4 **Be able to build working examples of audio circuits**

Amplifiers: practical amplifier circuits; building; testing; power supply requirements

Signal modifiers: practical tone control circuits; crossovers; basic effects units

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Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand safe and effective workshop practice	1.1 assess health and safety hazards in the workshop 1.2 assess risks from components by interpreting identification marks
LO2 Understand the function and use of passive electronic components	2.1 explain electronic theory which applies to simple circuits 2.2 explain the function and uses of passive components 2.3 analyse the function of passive networks 2.4 calculate parameters within simple circuits
LO3 Understand the function and use of active electronic components	3.1 explain the function and uses of active components 3.2 analyse the function of active networks 3.3 calculate parameters relating to active network circuits 3.4 explain the principles of a variety of amplifier circuits 3.5 explain the design of signal modifier circuits
LO4 Be able to build working examples of audio circuits.	4.1 use passive components to construct electronic circuits 4.2 use fabrication techniques to construct an amplifier circuit.

Guidance

Links

This unit provides underpinning knowledge for the technical music production units.

This unit links with:

- *Unit 29: Music Electronics and Maintenance*
- *Unit 49: Sound Creation and Manipulation*
- *Unit 52: Studio Recording and Engineering.*

This unit also has links with the following National Occupational Standards:

Technical Theatre

- CPD1 Improving your skills
- CPD2b Ensure that you and your team keep up to date with the technical and production areas of the live arts
- HS1 Working safely
- TP2.4a Contribute to developing and refining ideas for sound (C1)
- TP2.4b Developing and refining ideas for sound (C1).

Essential requirements

Basic workshop facilities at least are required for this unit. They must include soldering and either extraction systems or excellent ventilation. Learners require manufactured printed circuit boards, but most of the unit can be delivered using prototyping equipment such as breadboards and veroboard. Specialist equipment is best used for this, though it can be done in small quantities without specialist equipment. Learners will need to use a multimeter and oscilloscope; signal generators (including white noise generator) and bench power supplies would be useful for circuit testing.

Employer engagement and vocational contexts

Learners should be encouraged to find out about the audio facilities in the local area and visit them where appropriate. Any observation or work experience gained is of benefit to learners. The opportunity to speak to electronics or maintenance personnel, either in the workshop or within the centre's learning facilities, is of value.

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Unit 5: Audio Mastering and Manufacture

Unit code: A/601/1527

Level: 4

Credit value: 15

Unit aim

The aim of this unit is to enable learners to apply audio mastering skills by preparing recordings for the manufacturing process.

Unit abstract

'This is a Porky's prime cut' – these words were once carved into the run-off area of vinyl LPs as a sign from the mastering engineer George Peckham of his stamp of quality. In the age of the internet and bedroom studios, the mastering and manufacturing process is often overlooked or left to chance.

This unit develops a working knowledge of the role and work of a mastering engineer and the mastering studio. It is supported through study of the listening skills essential to mastering, how faults and problems are identified and how audio quality is ensured. Learners will explore the creative and corrective possibilities in mastering as the final stage of the recording process. They will learn to give technical consideration to the needs of different consumer formats and will investigate and use the various techniques needed for the process. They will crucially produce their own premastered CDs (PMCDs) ready for mass production.

Learners will learn the coding process that identifies tracks and times on a CD, other embedded data and the format standards for presentation to manufacturers. They will study the manufacturing process and prepare masters and media suitable for manufacturing and distribution. Learners will understand the importance of quality sound and the conflicting needs of the client, the manufacturer and the consumer.

Learning outcomes

On successful completion of this unit a learner will:

1 Be able to identify faults and problems in a recording and plan the mastering process

2 Be able to apply creative and corrective techniques in the mastering process

3 Understand the technical considerations needed to suit various formats and clients' needs

4 Be able to prepare a master recording in readiness for the manufacturing process.

Unit content

1 **Be able to identify faults and problems in a recording and plan the mastering process**

Types of recordings: format e.g. classical, commercial music, compilations, speech, sound effects or combinations thereof

Listening and analysis: listening to the whole programme for e.g. drop-outs, clicks, crackle, distortion, bad edits, phase, sibilance, matching track loudness, sampling frequency issues, overcompression

Production issues: final running order; gaps and fades; level adjustments; in-points and out-points; playing time and recording silence; relationship with client

2 **Be able to apply creative and corrective techniques in the mastering process**

Monitoring: monitor types e.g. domestic, professional monitors, mastering room acoustics, meter types, calibration, spectrum and dynamics analysis, cyclic redundancy checks/CRC codes, error correction, error verification, interpolation, over-levels, dBFS, word-clocks, block error rate, master-clocks, BLER on CD-R

Equalisation and level: levels e.g. maximum level, distortion, brightening, limiting and compressing, noise reduction and noise removal, dither, bit rate conversion, perceived loudness and the 'loudness wars', balancing clients' needs with quality

Editing: editing systems and software; digital editing stations; destructive and non-destructive editing

3 **Understand the technical considerations needed to suit various formats and clients' needs**

PQ encoding: coding e.g. PQ coding, P channel, Q channel, ISRC code, ISMWC, metadata, digital watermarking, PQ access point, time-code locations, SMPTE time-code reference, index points, playing time, negative offsets

CD formats: book standards e.g. red, yellow, green

Formats: modern and historic e.g. DDP format on Exabyte, PMCD on CD-R MO disc (PCM 9000), Umatic 1610/30 format, Exabyte, CD, CD-R, vinyl, DVD, compact cassette, mini disc, internet delivery, DAT, sample rates, AES SPDIF interfaces

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4 **Be able to prepare a master recording in readiness for the manufacturing process**

CD manufacture: optical disc technology e.g. glass master preparation, encoding, laser mastering, developing, plating, moulding, metalising, lacquering and printing, packaging, printing and insertion of written material, manufacturing timescales, co-ordination, labelling, inserts, packaging, artwork design and printing timescales

Quality control: quality control copies; listening to pre-manufacturing masters; the implications of authorising production runs

Distribution via internet: emergent technologies e.g. file formats, internet protocols, MP3, bandwidth, storage, CPU power, operating systems, browsers, buffer under-run, downloading, usage tracking, RSS, podcast protocols, piracy

Historical manufacturing systems: vinyl cutting and pressing; tape duplication; hard disk systems; production of 'mother tapes' and copies; recording onto blank reels (pancakes); high-speed recording; loading into C-zeros

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Be able to identify faults and problems in a recording and plan the mastering process	1.1 assess the needs of different types of recordings 1.2 analyse recordings and identify faults and problems 1.3 discuss and debate production issues and plan for a mastering session
LO2 Be able to apply creative and corrective techniques in the mastering process	2.1 use suitable monitoring and metering used in the mastering process 2.2 use dynamic signal processing effectively and creatively 2.3 creatively edit a variety of productions both in the analogue and digital domains 2.4 evaluate the uses and misuses of signal processing
LO3 Understand the technical considerations needed to suit various formats and clients' needs	3.1 explain PQ and other encoding and its role in the mastering process 3.2 explain CD/DVD formats and codings 3.3 explain data transfer protocols and formats
LO4 Be able to prepare a master recording in readiness for the manufacturing process.	4.1 produce a CD or DVD master for manufacturing 4.2 use quality control procedures and processes 4.3 master material for internet distribution 4.4 explain the processes involved in historical manufacturing processes.

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Guidance

Links

This unit links with:

- *Unit 6: Audio Post Production*
- *Unit 13: Computer Music Systems*
- *Unit 28: Music Composition Techniques*
- *Unit 29: Music Electronics and Maintenance*
- *Unit 34: Music Production Analysis*
- *Unit 35: Music Studio Production*
- *Unit 38: New Media Technology*
- *Unit 48: Songwriting Techniques and Skills*
- *Unit 52: Studio Recording and Engineering.*

This unit also has links with the following National Occupational Standards:

Technical Theatre

- CPD1 Improving your skills
- CPD2b Ensure that you and your team keep up to date with the technical and production areas of the live arts
- CPD4a Contributing to technical production work for performance
- TP8.4 Setting up and checking sound equipment (C6)
- HS1 Working safely.

Essential requirements

This unit deals with the role of the mastering engineer and their vital part in the quality control process. It is essential that learners interact with the tools required in the professional mastering environment to satisfy the requirements of this unit. Learners taking this unit must have ample opportunities to *master* the work of other learners taking recording and music production modules.

Learners will require access to comprehensively equipped studio environments, including a sound recording area and a wide range of microphones and signal processing equipment. Computer-based resources must reflect current practice. Learners will require access to up-to-date technology appropriate to their individual interests and musical direction.

Employer engagement and vocational contexts

Sections on the manufacturing process are included so that learners have a big picture of what manufacturers (and website developers, ISPs) need from the mastering process and so that a mastering engineer can explain difficulties often not perceived by the client. Visits to manufacturing plants are readily available and should be undertaken.

Learners should be encouraged to find out about the mastering facilities in the local area and visit them. Any observation or work experience that could be gained would also benefit the learner. The opportunity to speak to anyone involved in mastering, either in the studio or within the centre's learning facilities, would also be of value.

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Unit 6: Audio Post Production

Unit code: L/601/1533

Level: 5

Credit value: 15

Unit aim

The aim of this unit is to enable learners to work in audio post-production studios with the skills surrounding the combination of sound and images in a variety of media.

Unit abstract

Audio production has multiple applications, and though popular perception is that it is used primarily for music there are also post-production opportunities in the industry for a variety of media such as film, television, advertising, animation and new media. This often involves collating and combining production audio, library sound effects, music, and dialogue, as well as recording replacement dialogue and sound effects. The overall soundtrack has to be in sync with whatever form of image it is accompanying, and a delicate and objective balance must be struck between these elements so that they stand out where appropriate and, most importantly, so that the message of the holistic media product comes across clearly.

With advances in digital technology, editing and manipulating, audio has become much easier and more effective, meaning that producers are able to construct complex soundtracks consisting of countless elements. Each individual sound component fits into one of three categories: dialogue (the primary method of exposing a message), music, and sound effects. The latter two co-exist and sometimes overlap to support the telling of the story and enhance the sense of time, space and mood. This can be seen in the DVD extras for Peter Jackson's *The Lord of the Rings: The Two Towers*, which, as well as including documentaries on sound effects and the musical score, contain a revealing interactive feature of a fight scene that can be played with isolated music, sound effects, dialogue and production audio.

Throughout this unit, study will be facilitated by the study of 'real-world' examples such as the one indicated above. Learners will produce a portfolio of work demonstrating the practical ability to create soundtracks and an awareness of the business, as well as creative decisions taken in the real-life process. Learners will also learn the language and good practice used in audio post-production studios.

Learning outcomes

On successful completion of this unit a learner will:

1 Understand how key developments in sound and moving image technology have impacted on working practices

2 Be able to apply production and post-production recording techniques

3 Be able to edit a variety of audio tracks for different media

4 Be able to mix soundtracks for a final delivery.

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Unit content

1 **Understand how key developments in sound and moving image technology have impacted on working practices**

Historical context: the development of sound from silent films to modern surround; optical; magnetic and digital film soundtracks; television audio; online audio delivery systems; soundtracks; multi-channel surround in cinema and home playback systems; networks and network protocols

Aesthetic framework: the interaction of sound and the moving image; how technology has changed audience expectations

Technical fundamentals: slating; frame-rates; clock references; time-codes; frame-rate conversion; film; television; video and internet delivery standards

2 **Be able to apply production and post-production recording techniques**

Production sound: dialogue on the sound stage and on location; microphone choice and positioning; the importance of recording ambient sound and wild tracks

Post-production recording: voice replacement; spot effects; atmospheres; foley and foley artists

3 **Be able to edit a variety of audio tracks for different media**

Edit: tasks e.g. rushes, telecine, transfer bays, file formats and interchange, edit decision lists, auto-conforming, spotting sessions

Sound: techniques e.g. tracklaying, layout and presentation, digital sound processing and treatments, sound motif; diegetic and non-diegetic sounds; managing custom sound libraries and databases

Digital audio workstations: features; characteristics; context

Music: mix e.g. music matching and editing, recording, the work of the scoring studio and delivery of music to the final mix

4 **Be able to mix soundtracks for a final delivery**

Mix: techniques e.g. sound perspective, establishing sounds, natural and characteristic sounds, sound motif, hyper-real sound, point-of-audition sound, soundscapes

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand how key developments in sound and moving image technology have impacted on working practices	1.1 explain the history of film sound 1.2 analyse the importance of the impact sound has on the moving image 1.3 justify the aesthetic significance of sound with moving images 1.4 explain the technical fundamentals which underpin the development of sound with moving images
LO2 Be able to apply production and post-production recording techniques	2.1 plan and record dialogue and ambient sounds for a production 2.2 produce further recordings in a post-production situation
LO3 Be able to edit a variety of audio tracks for different media	3.1 edit media in a variety of formats 3.2 edit sound during post-production 3.3 use a digital audio workstation for the editing of dialogue, ADR, spot effects, atmospheres, foley and music 3.4 edit music during post-production
LO4 Be able to mix soundtracks for a final delivery.	4.1 handle a complex mix to completion 4.2 produce a final version for distribution and duplication.

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Guidance

Links

This unit links with:

- *Unit 3: Applied Music Production Techniques*
- *Unit 5: Audio Mastering and Manufacture*
- *Unit 10: Composing for Film and Television*
- *Unit 34: Music Production Analysis*
- *Unit 35: Music Studio Production*
- *Unit 43: Principles of Musical Sound*
- *Unit 52: Studio Recording and Engineering.*

This unit also has links with the following National Occupational Standards:

Technical Theatre

- CPD1 Improving your skills
- CPD2b Ensure that you and your team keep up to date with the technical and production areas of the live arts
- CPD4a Contributing to technical production work for performance
- TP8.4 Setting up and checking sound equipment (C6)
- HS1 Working safely.

Essential requirements

Learners must have access to recording facilities that are suitable for both music and effects recording. Suitable location recording equipment must be available. Learners must be taught on a wide variety of software and hardware so that compatibility and interface problems are highlighted.

Employer engagement and vocational contexts

Learners should be encouraged to secure briefs from industry-based clients if possible. Collaboration with media students requiring soundtracks could form a virtual-client brief, which would add a vocational context to the work.

Unit 7: Aural Perception

Unit code: K/601/1541

Level: 4

Credit value: 15

Unit aim

The aim of this unit is to enable learners to listen critically to music, to transcribe and analyse it and to use appropriate musical vocabulary.

Unit abstract

Listening skills are fundamental to the lives of professional musicians in all roles and in all fields of music. Having a good musical ear is a prerequisite of professional musical life and a tool that can be relied on throughout a musical career. This unit develops aural perception skills working with a wide range of musical styles – pop music, classical music and music from around the world. Through regular exercises in listening, learners will develop the skills needed to transcribe melodies and rhythms. They will learn how to analyse a piece of music using appropriate musical vocabulary, identifying and understanding the musical characteristics, and recognising the different stylistic elements involved.

On completion of this unit, learners will be able to transcribe music using conventional staff notation and other systems of notation where appropriate. They will understand and use appropriate musical vocabulary and be able to identify and describe the musical characteristics of different styles of music. They will be able to analyse and identify the key structural points of different musical forms. Learners will be able to write an analysis of a piece of music with reference to style, structure, instrumentation, texture, dynamics, recording techniques and use of music technology.

Learners will gain the skills they need to operate on a day-to-day basis in a musical environment, offering a knowledgeable and accurate use of vocabulary to engage in musical debate, transcription and discussion.

Learning outcomes

On successful completion of this unit a learner will:

1 Understand the stylistic elements of music

2 Be able to recognise the melodic and rhythmic elements of music

3 Understand the structural elements of music

4 Be able to transcribe the harmonic elements of music.

Unit content

1 **Understand the stylistic elements of music**

Style: aspects e.g. genre, period, mood or character, composer or performer(s)

Performance: aspects e.g. timbre and texture, instrumentation, dynamics, articulation, intonation, use of technology e.g. recording techniques and effects

Music: characteristics e.g. rhythmic complexity, time signatures, tempo, use of harmony, scale or modality, phrase lengths, form

2 **Be able to recognise the melodic and rhythmic elements of music**

Melody: scales and modes; key signatures; pitch names; simple and compound intervals; concords and discords

Rhythms: time signatures e.g. simple and compound time, duple, triple and quadruple; note values e.g. rests, ties and dots; triplets; tempo e.g. metronome markings and bpm; Italian terms; pulse and metre; note groupings; syncopation; drum patterns

3 **Understand the structural elements of music**

Structures: common structures e.g. 12 bar blues, verse and chorus, dance music collages, binary and ternary form

Structural devices: phrases; riffs e.g. loops, ostinato, canon; middle eight; intro and outro; hooks

4 **Be able to transcribe the harmonic elements of music**

Symbols: Roman numerals; chord charts

Triads: triad construction; positions and inversions; major and minor

Chord progressions: standard chord progressions; cadences e.g. perfect, imperfect, plagal and interrupted; cycle of fifths; III – VI – II – V – I; turnarounds and modulations

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Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand the stylistic elements of music	1.1 explain the key elements of different styles of music 1.2 assess different aspects of musical performance 1.3 evaluate the musical characteristics of different pieces
LO2 Be able to recognise the melodic and rhythmic elements of music	2.1 produce melodic transcriptions 2.2 produce rhythmic transcriptions
LO3 Understand the structural elements of music	3.1 explain common musical structures 3.2 evaluate structural devices used in music
LO4 Be able to transcribe the harmonic elements of music.	4.1 produce transcriptions of chord symbols 4.2 construct triads in different positions 4.3 produce transcriptions of chord progressions.

Guidance

Links

This unit links with:

- *Unit 8: Band Rehearsal and Performance*
- *Unit 10: Composing for Film and Television*
- *Unit 11: Composition in Context*
- *Unit 18: Harmony and Arranging*
- *Unit 19: Harmony and Composition*
- *Unit 21: Keyboard Skills*
- *Unit 28: Music Composition Techniques*
- *Unit 31: Music Notation*
- *Unit 32: Music Performance Skills*
- *Unit 33: Music Performance Studies*
- *Unit 39: Orchestration*
- *Unit 47: Singing Techniques and Styles*
- *Unit 48: Songwriting Techniques and Skills.*

Essential requirements

Learners must have access to practice rooms and a music studio with a piano or keyboard, facilities to play recorded music, a collection of scores, some simple percussion instruments and a whiteboard with manuscript.

There must be access to a wide selection of recordings which should include examples of western art music, contemporary art music, popular music and jazz, world music, and music from film and television.

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Unit 8: Band Rehearsal and Performance

Unit code: Y/601/1552

Level: 5

Credit value: 15

Unit aim

The aim of this unit is to enable the learner to develop, use and refine the skills required to rehearse and perform in a musical ensemble or band.

Unit abstract

The ability to work well and successfully as part of a band or ensemble is essential for any musician aspiring to a professional career within the music business. All musicians should have the ability to take direction, as well as create and innovate within a group structure. To do this, learners must be prepared to develop both the practical and aesthetic skills that are required for rehearsal and performance. Learners will gain expertise in the additional skills that are required for the planning and execution of a public performance. These include tasks such as the marketing and promotion of a musical event, how to formulate musical direction, management, organisational skills and communication with an audience.

The concept of this unit is that the learner participates effectively in the planning and rehearsal of a musical event and makes an active musical contribution to the final performance. They must then be able to reflect on their own performance and the performance of the band, and evaluate the event as a whole in order to develop the skills gained to use for further musical events.

In the first two outcomes learners must plan a successful performance by looking at repertoire, rehearsals and an appropriate venue for their musical event, as well as considering the additional skills of event organisation, management and promotion. In the second two outcomes learners take part in the musical event organised, demonstrating awareness of the use of technical equipment such as instrumentation, amplification, PA systems, lighting and health and safety. Finally, learners must consider the effectiveness of rehearsal and the quality of personal and group performance plus the success and professionalism in the delivery of the presentation overall.

Learning outcomes

On successful completion of this unit a learner will:

1 Be able to contribute to the planning of a performance

2 Understand musical direction and rehearsal techniques

3 Be able to participate in a series of public performances

4 Be able to evaluate rehearsals and performances.

Unit content

1 **Be able to contribute to the planning of a performance**

Selection: repertoire; performance personnel and roles; additional personnel; venue; date(s); equipment; use of any dress/uniform/costume

Rehearsal: personal and group rehearsal discipline; rehearsal times; rehearsal space; musical arrangements

Venue: concert hall; theatre; hotel; club; pub; university/college; outdoor stage; church; youth club; civic hall

People: managers; agents; venue management; venue staff

Promotion: promoters; self-promotion; publicists; public relations; use of media e.g. posters, radio, TV, print, website(s); use of social networking sites

2 **Understand musical direction and rehearsal techniques**

Rehearsal: tuning; use and maintenance of instruments and equipment; placement of equipment; acoustics; volume; health and safety; discipline; sustained concentration and focus

Musical direction: conducting; giving and taking direction; leadership; maintaining discipline; troubleshooting

3 **Be able to participate in a series of public performances**

Equipment: instruments; amplification; auxiliary equipment e.g. leads, effects pedals, strings, sticks, reeds; public address (PA) system; lighting; stands; health and safety

Professionalism: presentation; stage show; announcements; programme notes; time management

Performance: quality of performance; self-confidence; communication

4 **Be able to evaluate rehearsals and performances**

Rehearsals: effectiveness and success of rehearsals; number of rehearsals needed; attendance

Performance: success of performance; success of promotion; number in audience; reaction of audience

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Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Be able to contribute to the planning of a performance	1.1 select pieces for performance and develop rehearsal strategies needed 1.2 research and evaluate a range of venues 1.3 plan the roles of different personnel needed for the planning and promotion of a musical event 1.4 contribute to the effective promotion of a musical event
LO2 Understand musical direction and rehearsal techniques	2.1 evaluate a series of structured rehearsals 2.2 assess musical direction for rehearsal and performance 2.3 explain resources and accessories required for performance and maintenance of equipment 2.4 assess health and safety in rehearsal and performance
LO3 Be able to participate in a series of public performances	3.1 use resources and equipment required for a live music event 3.2 organise and take part in a musical performance in a professional and reliable manner 3.3 demonstrate an appropriate quality of performance and self-presentation
LO4 Be able to evaluate rehearsals and performances.	4.1 evaluate the effectiveness of the structured rehearsal series for each performance 4.2 use evaluations of previous rehearsal series to inform the plans for each subsequent series 4.3 evaluate the success of each performance according to the reaction of the audience 4.4 evaluate the effectiveness of the promotion of the musical event.

Guidance

Links

This unit can link to:

- *Unit 7: Aural Perception*
- *Unit 18: Harmony and Arranging*
- *Unit 20: Improvisation in Music*
- *Unit 31: Music Notation*
- *Unit 32: Music Performance Skills*
- *Unit 33: Music Performance Studies*
- *Unit 48: Songwriting Techniques and Skills.*

This unit also has links with the following National Occupational Standards:

Technical Theatre

- CPD1 Improving your skills
- CPD2b Ensure that you and your team keep up to date with the technical and production areas of the live arts
- CPD4a Contributing to technical production work for performance
- TP8.4 Setting up and checking sound equipment (C6)
- HS1 Working safely.

Essential requirements

In addition to material generally available, learners will need access to rehearsal and performance space. If possible, larger instruments such as pianos, drum kits, PA and backline amplification should be provided. Music and microphone stands will be required.

Employer engagement and vocational contexts

Learners should research the requirements of employers such as venue owners and PA hire companies. This task could incorporate the promotional activity expected of the performer and the technical equipment both the performer and the venue are expected to provide. Requirements will often vary according to the event and the venue.

Learners should be able to establish links with local venues and assess their suitability for future performance events. It is worth encouraging learners to attend live music events performed by local bands as well as national and international artists.

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Unit 9: Community Music Projects

Unit code: L/601/1564

Level: 5

Credit value: 15

Unit aim

The aim of this unit is to enable learners to set up and run community-based music projects from the initial planning stages to the final evaluation.

Unit abstract

Over the past 20 years, there has been a huge growth in community outreach work undertaken by professional musicians, with increasing numbers of national and local organisations providing support. The work takes place with people of all ages and backgrounds in a variety of settings, including hospitals, community centres and prisons. Musicians work in partnership with, for example, youth services and healthcare providers as well as, for example, dancers, visual artists and writers.

Learners will be involved in at least one community arts project and will engage with the participants in composition and performance. They will take part in each stage of the project from the planning stage through selection of participants, devising and performance, to evaluation. The unit includes an understanding of how to set up and run a variety of community-based music projects with due regard to programme planning, venues, financial constraints, appropriate funding and evaluation. It helps to develop and apply the necessary workshop skills.

The practical work is supported by an awareness of past and current developments in the field of community music making. Learners will explore the nature of music in the community and the philosophy behind outreach work.

On completion of this unit learners should demonstrate an understanding of the history and context of community music. They will be able to set up and organise community music projects, take part in group work, use and devise workshop skills, and evaluate the final product. It should prove valuable to learners wishing to pursue a career in music education or as freelance community musicians.

Learning outcomes

On successful completion of this unit a learner will:

1 Understand the history and context of community music

2 Be able to manage projects

3 Be able to apply workshop skills

4 Be able to take part in group work.

Unit content

1 **Understand the history and context of community music**

The workshop movement: community arts e.g. social uses of music, origins of community arts, 1960s socio-political theatre, animateurs and practitioners, composers-in-residence, pioneers e.g. Trevor Wishart and John Paynter

Audience and venue: location e.g. community centres, schools, youth clubs, residential homes, prisons, hospitals and geographical communities

Evaluation: feedback e.g. meetings, information collection through response sheets, questionnaires and interviews, case studies, analysis, findings and recommendations

2 **Be able to manage projects**

Funding: sponsorship; Arts Council and National Lottery; local authority grants; charitable trusts and foundations; European funding schemes; funding in kind

Programme planning: setting aims and objectives; structure; content; timing and co-ordination, materials and equipment; health and safety; meeting deadlines

Equal opportunities: equal access; special needs; geographical location; age, gender and ethnicity

3 **Be able to apply workshop skills**

Project-based work: concepts e.g. theme-based, musical and educational grounds, resources

Games: activities e.g. workshop games, ice-breaking activities, physical warm-up games; relaxation, and concentration and teamwork

Teaching skills: context e.g. leading group activities, National Curriculum, communication skills, classroom management, task setting, questioning and explaining, measurement of progress

4 **Be able to take part in group work**

Devising: concepts e.g. composing, improvising, responding to different stimuli, use of appropriate software and interactive hardware

Creativity and participation: concepts e.g. skills and confidence building, setting a context, creating, testing, rehearsing and performing

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Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand the history and context of community music	1.1 review the history of the workshop movement 1.2 compare audiences and venues for community music 1.3 evaluate community music projects
LO2 Be able to manage projects	2.1 plan funding applications 2.2 plan a programme of work for a community music project 2.3 follow equal opportunities guidelines in community music making
LO3 Be able to apply workshop skills	3.1 devise project-based community music work 3.2 lead musical workshop games 3.3 carry out teaching skills effectively as part of a community music project
LO4 Be able to take part in group work.	4.1 devise new music in response to different stimuli for group music making 4.2 demonstrate the principles of creativity and participation in community music work.

Guidance

Links

This unit links with:

- *Unit 11: Composition in Context*
- *Unit 22: Live Sound for Large Venues*
- *Unit 23: Live Sound for Small Venues*
- *Unit 24: Live Sound Systems Specifications and Operations*
- *Unit 25: Managing A Creative Business*
- *Unit 26: Marketing the Creative Arts*
- *Unit 27: The Music Business in the 21st Century*
- *Unit 28: Music Composition Techniques*
- *Unit 32: Music Performance Skills*
- *Unit 33: Music Performance Studies*
- *Unit 42: Preparation, Process and Production in the Creative Arts*
- *Unit 47: Singing Techniques and Styles.*

This unit also has links with the following National Occupational Standards:

Community Arts

- CA2 Provide direction and leadership for your team
- CA7 Assist in pitching for community arts work
- CA8 Obtain and use research information
- CA9 Keep up to date with developments within the arts
- CA12 Understand how your community arts organisation can meet market needs and satisfy customers needs
- CA16 Embracing diversity in your service provision.

Essential requirements

In addition to materials generally available, learners must have access to a large rehearsal space. Required resources may vary depending on the nature of the community music projects which are undertaken. These could include transport, outdoor venues, sound reproduction equipment, visual aids and art materials. Although access to music technology and software is not essential, this unit provides many opportunities for it to be incorporated.

Employer engagement and vocational contexts

The unit lends itself to different styles of music. Links should be developed with agencies such as community centres, schools and youth clubs. Learners should take part wherever possible in workshops with visiting musicians and other musical artists.

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Unit 10: Composing for Film and Television

Unit code: A/601/1544

Level: 5

Credit value: 15

Unit aim

The aim of this unit is to enable learners to understand and apply techniques to the composition of music for film and television, analysing key works and practical considerations.

Unit abstract

Composition for the moving image is a functional application of music composition, and is intended to serve and complement other creative material. It requires a different approach to abstract composition: film composers work within a set of externally imposed parameters to a brief that is usually supplied by a director. As film composition usually involves working with or for several different specialists (directors, editors and music editors), it requires flexibility, and the ability to compromise and adapt to changing requirements. The most important consideration when composing for moving image is to score music that is both appropriate to the film and meets the director's brief. As such, the composer must avoid flash or ego-driven composition, and score with economy and sensitivity.

Whilst traditional film composition often necessitates a big budget for multiple performers and studio time, modern film composers can actualise final productions from a good home studio, using synthesisers or quality sampled software instruments. Quality production methods are now easily available, but this also means there are many enthusiasts willing to score to moving image for the experience, making it difficult to find a way into the industry. Having a showreel that showcases either a specific and individual style or the capability to produce diverse work is essential to anyone wanting to compose for the moving image, and students will be required to produce a portfolio of original music scored to picture. They will also examine key examples, creative approaches, technical considerations, and the underpinning theories involved in composition for the moving image.

Learning outcomes

On successful completion of this unit a learner will:

1 Understand definitive examples of music composed for the moving image

2 Be able to apply compositional techniques involved in the composition of music for film and television

3 Understand practical considerations involved in composing for film and television

4 Be able to use studio technology in the production of music for film and television.

Unit content

1 **Understand definitive examples of music composed for the moving image**

History: landmarks e.g. film, television scores, the growth of music and the moving image, genre specific landmarks, exemplar material, use of source music, important composers

Analysis: musical and technical analysis e.g. comedies, horror films, westerns, war films, soap opera, television series, documentaries, advertisements, comparison of television and film approaches, landmark scores

Aesthetics: the art of composing for film/television e.g. dramatic and musical relationships, style, ethnic/geographic considerations, audience expectation, pastiche, period, source music versus original music, songs

2 **Be able to apply compositional techniques involved in the composition of music for film and television**

Melody and harmony: techniques e.g. motifs, multiple motifs, unaccompanied melody, melodic texture, melodic character, familiarity, harmonic language, pedal and ostinato, characterisation, tension and release

Rhythm: techniques e.g. tempo, pulse, metre, percussion, rhythmic themes, rhythmic ostinato, polyrhythm

Orchestration: techniques e.g. colour, colour changes, characterisation, locale, orchestral effects, scoring, instrumental effects, non-traditional instruments, contemporary instruments and rhythm sections, style

Drama: techniques e.g. underscoring, musical language, emotion, tension, emphasis and de-emphasis, silence, point of view, diegesis, conventions

3 **Understand practical considerations involved in composing for film and television**

Practicalities: working with music editors and directors e.g. budgets, communication, spotting, temp tracks, scoring stages, recording stages, timings, sound effects, dubbing, mixing, concepts, showreels, musical cues, demos, networking, agents

Film and television business: roles within the industries e.g. the director, the producer, editors; budgets, schedules, costing, contracts, copying, the script, cuts and assembly, copyright issues

Synchronisation: timing practicalities e.g. frames and frame-rates, click tracks, timing, cues, hits, hit points, stings, ritardandos and accelerandos, score lengths, tempo changes, timing mathematics

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4 **Be able to use studio technology in the production of music for film and television**

Technology: sound technology e.g. synthesisers, sampling, drum machines, sound libraries, MIDI, sequencers, synchronisation, standards; recording technology e.g. multi-track recording systems, stereo recording and mastering systems, tape and digital formats, synchronisation to video, digital synchronisation, multi-track and mastering standards, labelling systems, processors and effects units, microphone techniques, mixing consoles

Computer technology: advances e.g. hardware, software, virtual instruments, plug-ins, recording and editing systems, integrating audio and MIDI, compatibility, industry standards

Surround sound: advances e.g. psycho-acoustic sound localisation, Huygens' principle, wave field synthesis, Ambisonics, Penteo

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand definitive examples of music composed for the moving image	1.1 discuss important developments and key figures in the history of music for film and television 1.2 use analysis to integrate appropriate composition and scoring techniques into a personal creative resource 1.3 analyse the aesthetics of composing for film and television
LO2 Be able to apply compositional techniques involved in the composition of music for film and television	2.1 compose music showing the relationship between melody, harmony and the moving image 2.2 apply the effective use of rhythm and hit points in music for film and television 2.3 assess techniques for orchestration appropriate to film scoring 2.4 evaluate the relationship between music and drama in the context of scoring for film and television
LO3 Understand practical considerations involved in composing for film and television	3.1 appreciate the practicalities of functioning as a composer within the film and television business 3.2 analyse the structure and operation of the film and television business 3.3 discuss approaches to synchronisation between music and the moving image
LO4 Be able to use studio technology in the production of music for film and television.	4.1 use appropriate MIDI technology in the creation of music for film and television 4.2 use appropriate recording technology in the creation of music for film and television 4.3 integrate advances in computer technology into the creative production process 4.4 analyse the application of surround sound mixing 4.5 present a showreel of music composed for the moving image in an appropriate format.

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Guidance

Links

This unit links with:

- *Unit 6: Audio Post Production*
- *Unit 12: Computer Music Composition and Production*
- *Unit 28: Music Composition Techniques*
- *Unit 38: New Media Technology*
- *Unit 49: Sound Creation and Manipulation*
- *Unit 52: Studio Recording and Engineering.*

This unit also has links with the following National Occupational Standards:

Music Business (Record Labels)

- IM28 Create music for interactive media products.

Essential requirements

Learners will need access to computer music facilities and software with video, audio and MIDI capabilities as well as some access to video editing software. Surround sound mixing is desirable but is not a requirement to pass the unit. In centres without 5.1 mixing capabilities, learners can meet 4.4 through the analysis of existing soundtracks.

Employer engagement and vocational contexts

Learners should research the requirements of employers such as advertising and film/TV hire companies. This could incorporate what promotional activity is expected of agencies and what technical equipment both the composer and the facilities house are expected to provide.

Learners should be able to establish links with local companies and facilities houses and assess their suitability for future professional work.

Unit 11: Composition in Context

Unit code: J/601/1594

Level: 5

Credit value: 15

Unit aim

The aim of this unit is to enable learners to produce complete compositions according to given guidelines such as those provided by commissions.

Unit abstract

The work of a professional composer involves writing pieces to order, working to deadlines and producing high-quality performance materials. Most of the work of professional composers is produced in response to commissions. Composers will have to follow guidelines outlining the length of composition, instrumental forces, title, purpose (for example occasion, incidental music), venue, delivery dates. They will need to work towards and meet deadlines and be able to work effectively with other artists such as artistic directors. In order to pursue a career as a composer, students will need a working knowledge of writing for different sound combinations as well as the ability to compose in different styles.

In this unit, learners will engage with a variety of musical styles and combinations of sounds through creative exercises and projects leading to tutor-designed commissions, as well as real commissions where these can be found. Pastiche-style work will be balanced with compositional work, allowing learners more creative autonomy.

On completion of this unit learners will be able to write idiomatically for instruments, voices, electro-acoustic or other media. They will be able to compose in different styles and complete compositions according to various guidelines such as those given by commissions.

Learning outcomes

On successful completion of this unit a learner will:

1 Be able to compose in different styles

2 Be able to compose for different combinations of sounds

3 Be able to create a piece of music according to a commission

4 Be able to create a portfolio of compositions.

Unit content

1 **Be able to compose in different styles**

Styles: periods e.g. classical, baroque; schools e.g. impressionism, minimalism; genres e.g. lieder, reggae, drum and bass; places e.g. Spanish flamenco, African drumming

Musical characteristics: stylistic elements e.g. tonality, instrumentation, structure, rhythmic, melodic and harmonic devices

2 **Be able to compose for different combinations of sounds**

Instrumentation: instruments; voices; electro-acoustic or other media; capabilities and range of different instruments and voices

Timbre and texture: characteristics of instruments; playing techniques; number of parts; density; layers; counterpoint; accompaniments; doublings; backings; imitation; drum patterns

3 **Be able to create a piece of music according to a commission**

Commission: type of composition; length of composition; instrumental forces; title; purpose e.g. occasion, incidental music; venue; interim review meetings with the commissioner; delivery dates

Meeting the brief: following guidelines; making revisions; meeting deadlines; providing materials; producing score and extracting parts; communicating musical intentions clearly; attending rehearsals; understanding the medium, occasion and venue

4 **Be able to create a portfolio of compositions**

Portfolio: contrasting pieces; range of styles/genres; range of instrumental and vocal examples

Presentation: conventions of particular styles and genres; CD and DVD; MIDI and audio files; scores appropriate format e.g. full score or short score; lead sheet; chord chart; guitar tablature; graphic scores; relevant computer software e.g. Sibelius, Finale, Logic; editing

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Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Be able to compose in different styles	1.1 reproduce the characteristics of different styles of music 1.2 create compositions using different stylistic elements
LO2 Be able to compose for different combinations of sounds	2.1 produce compositions using different types of instrumentation idiomatically 2.2 manipulate and develop different timbres and textures idiomatically
LO3 Be able to create a piece of music according to a commission	3.1 follow the guidelines of a commission 3.2 create a piece of music meeting the brief of the commission
LO4 Be able to create a portfolio of compositions.	4.1 create a portfolio of contrasting compositions 4.2 produce the composition portfolio using appropriate presentation and editing methods.

Guidance

Links

This unit links with:

- *Unit 7: Aural Perception*
- *Unit 10: Composing for Film and Television*
- *Unit 18: Harmony and Arranging*
- *Unit 19: Harmony and Composition*
- *Unit 20: Improvisation in Music*
- *Unit 28: Music Composition Techniques*
- *Unit 31: Music Notation*
- *Unit 42: Preparation, Process and Production in the Creative Arts*
- *Unit 48: Songwriting Techniques and Skills*
- *Unit 54: World Music Composition and Performance.*

This unit also has links with the following National Occupational Standards:

Music Business (Record Labels)

- IM28 Create music for interactive media products.

Essential requirements

A wide range of recordings of different music, including western classical music, contemporary art music, popular music, jazz music and music from around the world will be needed. Access to a range of scores is also required.

Learners will benefit from access to keyboards as well as computer software packages, ideally including film editing software. Frequent opportunities must be provided for the performance of the learner's compositions.

Employer engagement and vocational contexts

This unit provides opportunities for learners to make links with local music organisations. They could, for example, compose a commissioned piece for a local choir or drumming group. These links could also be made through composition workshops from visiting artists and attendance at live performances.

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Unit 12: Computer Music Composition and Production

Unit code: F/601/1545

Level: 5

Credit value: 15

Unit aim

The aim of this unit is to enable learners to use the music composition, production and audio features made available by modern computers.

Unit abstract

Technology advances in recent years have brought about a significant change in how we produce and compose music. This unit looks into the tools and techniques made available to facilitate the process of creation, manipulation and production of musical ideas and sound. Learners will examine a range of software and hardware options with a view to integrating in the creative process.

Throughout this unit learners will develop an individual creative resource of techniques, processes and material. Learners should be exposed to a range of musical examples in which these techniques are used. Learners should be encouraged to apply these techniques and processes to their preferred musical idioms.

Many of the concepts and techniques involved in this unit can be delivered by demonstration. It is essential for it to be reinforced by 'hands-on' practice and experimentation. Supervised workshop sessions will allow individual queries and problems to be addressed. Learners should be encouraged to manage their own learning, supported by tutorial and group discussion. Presentation and discussion of learners' work by their peers can be valuable for sharing ideas and constructive criticism.

Evidence for most of the content of this unit will take the form of a portfolio of music software files that demonstrates the learner's growing affinity with computer-based composition and production. Where possible it would be beneficial for the musical content of this portfolio to represent the creative direction of each learner. It is likely that in certain cases the actual content will have to be dictated to ensure that all of the outcomes are covered.

Learning outcomes

On successful completion of this unit a learner will:

1 Be able to use computers to synthesise and process sound

2 Understand protocols used to control music software and hardware

3 Understand the tools used for composing and arranging using technology

4 Be able to produce musical material using a range of techniques and technology.

Unit content

1 **Be able to use computers to synthesise and process sound**

Sound editing and processing: top and tailing samples; time stretching; pitch shifting; convolution

Software and hardware synthesis: software samplers; sample-based software synthesisers; classic synthesiser emulators; virtual instruments; hardware synthesisers

Synthesis techniques: additive synthesis; subtractive synthesis; FM synthesis; wavetable synthesis

2 **Understand protocols used to control music software and hardware**

MIDI: MIDI controllers; MIDI conventions e.g. specification, note messages, controller messages, system exclusive messages, MIDI time-code

Hardware controllers: controller types e.g. slider, rotary, touch sensitive, visual feedback, pads; controller programming; controller interfacing e.g. USB, MIDI chains

Sound utilities: sound routing utilities e.g. sound flower, Jack; application interfacing protocols e.g. VST, audio units, RTAS, Rewire

3 **Understand the tools used for composing and arranging using technology**

Sequencers and host applications: packages e.g. Audiomulch, Reactor, Reason, Cubase, Logic, Pro Tools, Sibelius, Finale, Supercollider, Max/MSP

Composition and arranging techniques: editing; audio and MIDI data transforming; workflow; application specific functionalities

4 **Be able to produce musical material using a range of techniques and technology**

Planning: material e.g. sources, concepts, style; aesthetic considerations

Production: processes e.g. synthesis, editing

Mixing and mastering: processes e.g. computer-based editing, levels, digital transfer, exporting files, professional standards, hardware

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Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Be able to use computers to synthesise and process sound	1.1 select appropriate sound editing and processing techniques 1.2 label software and hardware processors correctly 1.3 describe various synthesis techniques
LO2 Understand protocols used to control music software and hardware	2.1 explain MIDI protocols used by MIDI controllers 2.2 assess hardware controllers and their applications in the field of music composition and production 2.3 categorise sound utilities encountered in the field of music composition and production
LO3 Understand the tools used for composing and arranging using technology	3.1 evaluate a range of sequencers and host applications 3.2 review a range of composition and arranging techniques
LO4 Be able to produce musical material using a range of techniques and technology.	4.1 plan the production of a computer-based music piece 4.2 compose using modern production processes 4.3 create mastered mixes of compositions.

Guidance

Links

This unit links with:

- *Unit 12: Computer Music Composition and Production*
- *Unit 28: Music Composition Techniques*
- *Unit 30: Music in Context*
- *Unit 41: Planning for Public Performance*
- *Unit 49: Sound Creation and Manipulation.*

This unit also has links with the following National Occupational Standards:

Technical Theatre

- CPD1 Improving your skills
- CPD2b Ensure that you and your team keep up to date with the technical and production areas of the live arts
- HS1 Working safely
- TP2.4a Contribute to developing and refining ideas for sound (C1)
- TP2.4b Developing and refining ideas for sound (C1).

Essential requirements

For learners to develop an in-depth knowledge of computer systems for the composition and production of music, it is essential that they be given the opportunity to work with the latest equipment and software versions available.

Learners must have the opportunity to incorporate recorded audio files of the highest quality; therefore they must have access to recording facilities of a suitable standard.

Employer engagement and vocational contexts

Learners should research the requirements of employers such as advertising and film/TV companies. This could incorporate what promotional activity is expected of agencies and what technical equipment the composer and facilities house are expected to provide.

The learner should be able to establish links with local companies and facilities houses and assess their suitability for future professional work.

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Unit 13: Computer Music Systems

Unit code: R/601/1551

Level: 4

Credit value: 15

Unit aim

This unit aims to enable learners to exploit the possibilities of computers in music composition, production and sound creation.

Unit abstract

Computers are ubiquitous in the world of music production and are an essential tool in the studio, in performance and in rehearsal. Where computers were once to be found only in high-end recording facilities, they are now essential for each musician and member of the production, management and administration teams. Even the guitarist uses their laptop to select patches on their amplifier and store performance information for future reference.

This unit examines the hardware, software, storage and networking features found on computers that are used for the production of music. It also investigates the opportunities offered by different computing platforms and the implications of emerging technology upon the composition and production processes.

It is important to understand the language of computers and to be able to use the terminology correctly and confidently. This unit, therefore, looks at computers in general but always keeps one foot in the music industry. Software develops at incredible speed, but it is crucial to keep up to date with the latest developments as the 'new' is often the originality which a musical product needs to stand out from the crowd.

It is also crucial to consider the back-up and security of data as the challenges of true portable computing and the opportunities offered by cloud computing become available to musicians around the world.

Learners are not expected to have their own computers to complete this unit, although it is expected that by the end of their studies they will not only want one but will be able to specify it thoroughly and identify exactly the software and services they should have to work in the music production environment.

Learning outcomes

On successful completion of this unit a learner will:

1 Understand the computer technology available for the composition and production of music

2 Understand the software available for the composition and production of music

3 Understand the software available for the creation and manipulation of sound

4 Be able to store and back up data.

Unit content

1 **Understand the computer technology available for the composition and production of music**

Platforms and power: make and model; speed e.g. clock, bus; cores; cache; memory; storage; connections and interfaces; form factor; support structures; operating systems

Audio interfaces: sound cards; internal; external; onboard; bus powered; power considerations; specifications; standards supported

MIDI interfaces: types; basic interfaces; multi-channel interfaces; synchronisation

Input devices: keyboards e.g. basic, performance keyboards; hardware controllers and control surfaces

2 **Understand the software available for the composition and production of music**

Audio and MIDI processing: sequencing software; MIDI processing software; compositional aids; scoring; MIDI editors; integrating audio; audio processing e.g. audio editing software; audio processing software; plug-ins

Virtual studio software: integrated packages; strengths and weaknesses; support; complexity; cost-benefit analysis; major companies and niche approaches

Software maintenance: upgrades; plug-ins; conflicts; compatibility; troubleshooting

3 **Understand the software available for the creation and manipulation of sound**

Sampling and synthesis: audio sampling software; editing techniques; manipulation of samples; quality; storage and library facilities; using samples in computer music systems; integrated systems

Audio editing: integrated packages; strengths and weaknesses; support; complexity; export facilities, file types and conversion

4 **Be able to store and back up data**

Fixed storage media: hard drives; capacity; transfer speeds; maintenance; format; security

Removable storage media: portable hard drives and pen drives; capacity; use and maintenance; format; security

The cloud: local back-up; back-up in the cloud; online services; bootable partitions; hard drive failure; recovering data

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Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand the computer technology available for the composition and production of music	1.1 justify computer makes and models for the creation of music 1.2 evaluate audio interfaces and the advantages offered by emerging technology 1.3 evaluate MIDI interfaces and the advantages offered by emerging technology 1.4 explain the suitability of input devices for both user interface and MIDI for the production process
LO2 Understand the software available for the composition and production of music	2.1 assess audio recording software available for both the composition and production of music 2.2 assess MIDI processing software available for both the composition and production of music 2.3 install and configure computer software relating to the production process 2.4 explain the maintenance and troubleshooting procedures required for computer music systems
LO3 Understand the software available for the creation and manipulation of sound	3.1 evaluate the features of sampling software 3.2 evaluate the features of software synthesis software 3.3 evaluate strengths of manufacturers, platforms and techniques
LO4 Be able to store and back up data.	4.1 use supplied fixed storage media 4.2 use removable storage media 4.3 back up to off-site storage suppliers 4.4 recover data from off-site or removable storage devices 4.5 use an external bootable drive (or partition) to restore data.

Guidance

Links

This unit links with:

- *Unit 4: Audio Electronics*
- *Unit 12: Computer Music Composition and Production*
- *Unit 29: Music Electronics and Maintenance*
- *Unit 49: Sound Creation and Manipulation*
- *Unit 52: Studio Recording and Engineering.*

This unit also has links with the following National Occupational Standards:

Technical Theatre

- CPD1 Improving your skills
- CPD2b Ensure that you and your team keep up to date with the technical and production areas of the live arts
- HS1 Working safely
- TP2.4a Contribute to developing and refining ideas for sound (C1)
- TP2.4b Developing and refining ideas for sound (C1).

Essential requirements

Learners need access to ICT equipment for the study and research of computer specifications, although they are likely to have access to their own equipment at home.

A full range of sequencing software must be available for learners to explore the features offered by competing companies and to develop critical comparative skills. Centres must not fall into the trap of specifying one platform for the study of the unit and limiting learners' experience of software evaluation.

Employer engagement and vocational contexts

Learners should be encouraged to find out about the studio, recording, dubbing, media and new technology content facilities in the local area. Where possible, any session observation or work experience gained would benefit them. The opportunity to speak to any studio personnel, either in the studio or within your own learning facilities, would be of value.

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Unit 14: Creative Arts Professional Practice

Unit code: H/601/1621

Level: 5

Credit value: 15

Unit aim

The aim of this unit is to enable learners to understand the current professional environment, employment opportunities and demands of their specialist area, and their ability to respond accordingly.

Unit abstract

Employment in the arts is centred largely in small to medium sized enterprises, with very large numbers of people being self-employed and on contract. The pattern across the sector is that people will have, at some point in their working lives, a period of self-employment or contract work and the term 'portfolio career' is now an accepted and common term to describe how artists see themselves.

Professional practice in the creative arts industries requires a mixture of generic transferable skills and conventions, as well as more specific demands for different fields within the industry. Practitioners must adhere to employment law relevant to their employment status, and promote their services using appropriate marketing strategies and by building a reputation for being effective and reliable. A well-presented CV is vital for anyone seeking employment and, whether planning to work as a performer, composer, engineer, producer, or live sound engineer, a CV within the music industry requires some form of portfolio evidence of the work that the practitioner undertakes.

This unit will promote skills that allow the learner to maintain a level of personal currency within the industry, develop a targeted and current profile as a practitioner, and maximise employment opportunities within the relevant specialism. Learners will also develop the ability to function within the relevant legal and statutory framework.

Learning outcomes

On successful completion of this unit a learner will:

1 Understand current developments in the relevant specialisms within the industry

2 Be able to sustain and extend a current personal profile as a practitioner

3 Understand how to sustain employment opportunities within the relevant specialism

4 Be able to apply the relevant legal and statutory framework to the art form.

Unit content

1 **Understand current developments in the relevant specialisms within the industry**

Developments: current e.g. new technologies and techniques, audience demand and niche markets, funding mechanisms and access methodology, artistic developments and trends, interface between art forms

Market research: information gathering e.g. attendance at arts events, magazines, exhibitions and demonstrations, questioning, brochures, radio, television, internet forums, message boards, polls, statistics

2 **Be able to sustain and extend a current personal profile as a practitioner**

Continued professional development: development of an individual skill base; engagement in self-assessment; devising and maintaining a valid CV/portfolio of work; personal publicity and promotion; contracts and agents; personal budget

3 **Understand how to sustain employment opportunities within the relevant specialism**

Employment: type e.g. self-employed, contracted, salaried; national insurance; tax e.g. self-assessment and recording income and expenditure, invoices, entrepreneurial, cash-in-hand

Strategies: methods e.g. marketing, opportunities abroad, trade press

Trade bodies: support offered e.g. union membership, portfolio development, skills base, jobs market

4 **Be able to apply the relevant legal and statutory framework to the art form**

Professional bodies: appropriate e.g. manufacturer organisations, trade bodies, magazine and journal networks

Regulations: relevant e.g. health and safety legislation, copyright/PRS, MCPS, contracts, licences, venue regulations, tax, union support

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Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand current developments in the relevant specialisms within the industry	1.1 analyse current developments, market funding mechanisms and methods of access for practitioners in the chosen art form 1.2 evaluate change in practice and audience demands in the art form
LO2 Be able to sustain and extend a current personal profile as a practitioner	2.1 devise and maintain a current CV/portfolio of work or a database of agents and professional contacts 2.2 develop a Continuing Professional Development (CPD) strategy based on research into an art form and current/future opportunities
LO3 Understand how to sustain employment opportunities within the relevant specialism	3.1 assess the range of employment opportunities in the chosen field 3.2 evaluate marketing strategies for practitioners within the relevant specialism 3.3 explain the support offered by creative industries trade bodies and unions in supporting employment
LO4 Be able to apply the relevant legal and statutory framework to the art form.	4.1 apply the relevant legal and statutory framework when practising chosen art form 4.2 explore the support offered by professional bodies within a particular specialism.

Guidance

Links

This unit links with:

- *Unit 22: Live Sound for Large Venues*
- *Unit 23: Live Sound for Small Venues*
- *Unit 24: Live Sound Systems Specification and Operation*
- *Unit 25: Managing a Creative Business*
- *Unit 26: Marketing the Creative Arts*
- *Unit 32: Music Performance Skills*
- *Unit 42: Preparation, Process and Production in the Creative Arts*
- *Unit 47: Singing Techniques and Styles.*

This unit also has links with the following National Occupational Standards:

Community Arts

- CA2 Provide direction and leadership for your team
- CA7 Assist in pitching for community arts work
- CA8 Obtain and use research information
- CA9 Keep up to date with developments within the arts
- CA12 Understand how your community arts organisation can meet market needs and satisfy customer's needs
- CA16 Embracing diversity in your service provision.

Essential requirements

Learners will require access to relevant literature, for example, current legislative and statutory documents, Arts Council reports, quality newspapers and magazines, annual reports from a range of arts organisations, government papers and consultation documents.

Employer engagement and vocational contexts

This unit has multiple opportunities for employer engagement including guest speakers and industry days, but also through real engagement with employers in a vocational.

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Unit 15: Creative Arts Research Skills

Unit code: J/601/1532

Level: 5

Credit value: 20

Unit aim

This unit aims to enable learners to acquire the necessary skills and techniques to undertake research in the creative arts and present their findings in an appropriate form.

Unit abstract

This unit will allow learners to develop the research skills they need to support both theoretical and practical elements of their chosen genre. This can be applied academically, to enable learners to complete a presentation of independent work or to support and develop practical work, for example in identifying specific methodologies and techniques or providing the historical or social background for a realised product.

Learners will be able to select the most appropriate methods and techniques for undertaking detailed research. They will have the opportunity to develop the skills needed to identify suitable source material and to apply the information in an appropriate context. They will acquire the skills to distinguish between primary and secondary sources, to evaluate the validity of such sources, and to extract the necessary information from them. They will then learn to synthesise their research material into an appropriate form for presentation.

Learners will identify the most suitable ways of presenting and disseminating this information in order to support specific performing arts and music activities. This will include techniques for gathering research, referencing, summarising key points and the management of research for a presentation. Learners will also be encouraged to present the researched material in a number of ways, for example written texts, PowerPoint presentations, practical demonstrations, audio and video recordings, or graphic illustrations.

On completion of this unit, learners should demonstrate the ability to select appropriate topics for research, source and categorise research data, collate information to support their argument and present the findings using a suitable format.

Learning outcomes

On successful completion of this unit a learner will:

1 Be able to select effective methods and techniques for undertaking research activities

2 Understand the validity of appropriate research material from primary and secondary information sources

3 Be able to formulate critical opinions on a selected research subject

4 Be able to present outcomes based on research using a recognised format.

Unit content

1 **Be able to select effective methods and techniques for undertaking research activities**

Research methods: type of research e.g. qualitative, quantitative, systematic, original; use of libraries and archives; internet and digital resources; conducting/interpreting market research e.g. questionnaires, polls; undertaking interviews; critical review e.g. performance/production or score analysis

Academic framework: identifying previous research e.g. literature review; selecting suitable methodologies e.g. musicological frameworks, reception, critical analysis, praxis; contextualising the area of research e.g. acknowledging issues of gender, race, sexuality, politics; applying appropriate referencing techniques

2 **Understand the validity of appropriate research material from primary and secondary information sources**

Organisation: standards e.g. thematic, chronological, biographical, comparative viewpoints, informed awareness of different perspectives, specific issues

Primary sources: evidence e.g. first editions, autographed scores, live performance, studio recordings, audio-visual presentations, internet resources, online polls, social networking research, interviews, personal accounts, notes and annotations, correspondence, statistical data

Secondary sources: evidence e.g. publications, referenced texts, archives, reviews, recordings/photographs/videos of live performance, historical/social/cultural documentation

3 **Be able to formulate critical opinions on a selected research subject**

Formulation: critical evaluation of sources; synthesis/interpretation of data; critical thinking; objectivity; identification of target audience; presentation of viewpoint

Methodology: context e.g. critical review of material, links to practice, balance between text and other forms

4 **Be able to present outcomes based on research using a recognised format**

Format: suitability e.g. essays, dissertations, journal entries, bibliographies, reading lists, live practice, audio recordings, audio-visual presentations, production notes, presentations, seminar, forum, PC-based (PowerPoint etc), websites, digital journals, social networking, prototype designs, saleable projects, scores, texts, production design

Presentation methods: context e.g. written texts, verbal presentations, recordings, performances, demonstrations and workshops

Referencing systems: citation e.g. Harvard, American Psychological Association (APA), Modern Languages Association (MLA)

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Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Be able to select effective methods and techniques for undertaking research activities	1.1 review effective research methods for a selected subject area 1.2 select and justify academic frameworks that will focus research activities
LO2 Understand the validity of appropriate research material from primary and secondary information sources	2.1 organise research material using appropriate categories 2.2 evaluate the effectiveness of primary sources of research for a selected subject area 2.3 assess breadth of research by reviewing the validity of secondary sources
LO3 Be able to formulate critical opinions on a selected research subject	3.1 formulate opinions based on the interpretation of research material 3.2 apply appropriate methodologies to research information 3.3 evaluate the findings, making recommendations for further consideration
LO4 Be able to present outcomes based on research using a recognised format.	4.1 select a suitable format to present research information 4.2 realise and present the outcomes of the research using a recognised format.

Guidance

Links

This unit links with:

- *Unit 11: Composition in Context*
- *Unit 15: Creative Arts Research Skills*
- *Unit 25: Managing a Creative Business*
- *Unit 26: Marketing the Creative Arts*
- *Unit 27: The Music Business in the 21st Century*
- *Unit 30: Music in Context*
- *Unit 32: Music Performance Skills*
- *Unit 33: Music Performance Studies*
- *Unit 42: Preparation, Process and Production in the Creative Arts*
- *Unit 46: Research Project*
- *Unit 47: Singing Techniques and Styles.*

This unit also has links with the following National Occupational Standards:

Community Arts

- CA2 Provide direction and leadership for your team
- CA7 Assist in pitching for community arts work
- CA8 Obtain and use research information
- CA9 Keep up to date with developments within the arts
- CA12 Understand how your community arts organisation can meet market needs and satisfy customer's needs
- CA16 Embracing diversity in your service provision.

Essential requirements

Students will require access to a library with a broad range of research material – for example reference handbooks, periodicals, online storage, internet access, recorded materials and critical review publications.

There must be resources available for the preparation and delivery of research material in printed, video, audio and live forms.

Employer engagement and vocational contexts

This unit offers multiple opportunities for employer engagement, for example guest speakers and industry days, and through real engagement with employers in a vocational

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Unit 16: Critical Music Listening

Unit code: K/601/1328

Level: 5

Credit value: 15

Unit aim

This unit aims to develop learners' critical listening abilities necessary to function successfully as a performer, producer or engineer.

Unit abstract

The musical environment is a complex and demanding place. Anyone working with music needs to appreciate – and distinguish between – a range of sonic qualities, from performance characteristics through timbral identities to technical matters. The skill of the sound engineer's art is wholly dependent on the ability to aurally identify a range of sonic variances, timbral combinations, volume and balance levels, ambience qualities and equipment coloration. The impact of the performer will rely on attention to musical detail and expertise in recognising and eradicating unwanted and adverse sonic features. The successful musician will be able to function in both the performance and studio environment.

Acquiring and developing critical music listening skills expands creative opportunities. Film music necessitates a wide timbral appreciation. Electronic manipulation with creative synthesis and sampling requires an appreciation and knowledge of the tonal palette.

Learners should take every opportunity to listen to and analyse a wide variety of performances. Live and recorded sound generates different sonic problems with their own considerations. While the majority of recordings are highly processed, all final mixes can generate discussion on the separate elements outlined. Focusing closely on an individual instrument throughout a song will reveal many aspects of the art of listening – listening as opposed to simply hearing.

In this unit musical sounds or elements refer to traditional instruments or any other sources.

On completion of this unit, learners will have developed a deeper understanding of music and sonic listening skills and awareness.

Learning outcomes

On successful completion of this unit a learner will:

1 Understand individual musical characteristics in a performance or recording

2 Understand essential musical ingredients that contribute to a performance or production

3 Understand sonic problems that may have a negative effect upon music performance or production

4 Be able to accurately balance combinations of musical and other sonic elements in a performance or production.

Unit content

1 **Understand individual musical characteristics in a performance or recording**

Pitch: elements e.g. intonation, frequency pulsing, independent musical lines, melody, bass line, inner harmonies, octave

Harmony: elements e.g. temperament, dissonance, false harmonics, consonance, scales, modes, series

Timbre: elements e.g. breadth of audio spectrum, brightness, EQ, dynamic processing, identifying instruments, combinations, tone colour, orchestrating musical lines, sound synthesis, waveform types, hi-pass and lo-pass filters

2 **Understand essential musical ingredients that contribute to a performance or production**

Homogenous: soundfield e.g. suitable ambient environment, mix, balance, blend, clarity, position in depth of soundfield, slow and fast release compression, psycho-acoustic issues

Disparate: characteristics e.g. solo, panning, placement in stereo (or surround) field, depth of the field, contrast between sounds, clarity, boosts and cuts, amplitude change

Groupings: placement e.g. placement in stereo field (panning), depth of field, alternative balance for different musical styles, analysis of sound in nature and urban environments, focus

3 **Understand sonic problems that may have a negative effect upon music performance or production**

Musical: accuracy e.g. incorrect notes, sharp, flat, keeping time, variations in tempo and pitch

Balance and timbre: characteristics e.g. audio spectrum, acoustic environments, blend, intelligibility, volume and compression considerations, reverb issues, EQ, effect of the listening environment, stereophony anomalies, normalisation

Extraneous problems: errors e.g. pops and clicks, clips, signal-to-noise ratio, excessive low frequency content, hums, balance, editing, phase problems, cross-talk, microphone and headphone spill, feedback and howl-round, slapback and echo problems, drop-outs, analogue and digital distortion, sibilance, loudness, reverse image, polarity reversal

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4 **Be able to accurately balance combinations of musical and other sonic elements in a performance or production**

Timbral corrections: errors e.g. creative and corrective EQ, digital editing, aural treatments, extraneous problems

Balance/placement: musical e.g. positions in stereo (or other) field, monitoring and metering problems, speaker types and monitoring environments, relative loudness, compression and perceived loudness, sound stage, reverb parameters

Use of effects: sonic e.g. multi-effects (chorus, phase, flange delay etc), reverb, digital enhancements, context considerations, processors and enhancers

Quality: resolution e.g. demo master, bit resolution, sampling frequencies, intelligibility, sound reinforcement or amplification, balance of acoustic and amplified sound, soundchecks in empty or full performance spaces, signal-to-noise ratio

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand individual musical characteristics in a performance or recording	1.1 evaluate pitch elements 1.2 analyse harmonic elements 1.3 evaluate nuances and differences between timbral elements
LO2 Understand essential musical ingredients that contribute to a performance or production	2.1 analyse the sonic and musical effectiveness of homogenous musical combinations 2.2 explain the sonic characteristics of disparate musical combinations 2.3 evaluate the elements in similar and dissimilar groupings that influence a musical performance
LO3 Understand sonic problems that may have a negative effect upon music performance or production	3.1 identify musical shortcomings 3.2 explain balance and timbre problems 3.3 explain extraneous problems that detract from musical or sonic effectiveness
LO4 Be able to accurately balance combinations of musical and other sonic elements in a performance or production.	4.1 carry out appropriate timbral and sonic corrections and/or adjustments to individual and group elements 4.2 justify appropriate balance and/or placement decisions to individual and group sonic situations 4.3 create appropriate and musically sympathetic effects or sonic enhancements to individual or group elements 4.4 create a product that demonstrates and adheres to the quality standards required for high-calibre results.

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Guidance

Links

This unit links with:

- *Unit 2: Acoustics*
- *Unit 3: Applied Music Production Techniques*
- *Unit 5: Audio Mastering and Manufacture*
- *Unit 6: Audio Post Production*
- *Unit 7: Aural Perception*
- *Unit 8: Band Rehearsal and Performance*
- *Unit 10: Composing for Film and Television*
- *Unit 11: Composition in Context*
- *Unit 18: Harmony and Arranging*
- *Unit 19: Harmony and Composition*
- *Unit 20: Improvisation in Music*
- *Unit 23: Live Sound for Small Venues*
- *Unit 24: Live Sound Systems Specification and Operation*
- *Unit 34: Music Production Analysis*
- *Unit 35: Music Studio Production*
- *Unit 39: Orchestration*
- *Unit 43: Principles of Musical Sound*
- *Unit 48: Songwriting Techniques and Skills*
- *Unit 52: Studio Recording and Engineering.*

This unit also has links with the following National Occupational Standards:

Technical Theatre

- CPD1 Improving your skills
- CPD2b Ensure that you and your team keep up to date with the technical and production areas of the live arts
- CPD4a Contributing to technical production work for performance
- TP8.4 Setting up and checking sound equipment (C6)
- HS1 Working safely.

Essential requirements

Learners will need access to a wide range of music performances, live and recorded, for both learning examples and general listening. A selection of good recordings and recordings with deficiencies must be provided.

High-quality reproduction equipment positioned in a suitable listening environment is necessary to explore the nuances of audio issues.

Employer engagement and vocational contexts

All performance and practical applications of music disciplines rely heavily on good listening skills. Learners can make links with, and draw upon the expertise of, industries such as performance venues (local theatres, music venues, festival organisations, equipment hire companies, live performance engineers and specialists) and recording studios (local and national recording studios, TV and radio studios, post-production specialists).

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Unit 17: Employability Skills

Unit code: A/601/0992

Level: 5

Credit value: 15

Unit aim

This unit provides learners with the opportunity to acquire honed employability skills required for effective employment.

Unit abstract

All learners at all levels of education and experience require honed employability skills as a prerequisite to entering the job market. This unit gives learners an opportunity to assess and develop an understanding of their responsibilities and performance in or when entering the workplace.

It considers the skills required for general employment such as interpersonal and transferable skills, and the dynamics of working with others in teams or groups, including leadership and communication skills.

It also deals with the everyday working requirement of problem solving, which includes the identification or specification of the 'problem', strategies for its solution and then evaluation of the results of the solution through reflective practices.

Learning outcomes

On successful completion of this unit a learner will:

1 Be able to determine own responsibilities and performance

2 Be able to develop interpersonal and transferable skills

3 Understand the dynamics of working with others

4 Be able to develop strategies for problem solving.

Unit content

1 **Be able to determine own responsibilities and performance**

Own responsibilities: personal responsibility; direct and indirect relationships and adaptability, decision-making processes and skills; ability to learn and develop within the work role; employment legislation, ethics, employment rights and responsibilities

Performance objectives: setting and monitoring performance objectives

Individual appraisal systems: uses of performance appraisals e.g. salary levels and bonus payments, promotion strengths and weaknesses, training needs; communication; appraisal criteria e.g. production data, personnel data, judgemental data; rating methods e.g. ranking, paired comparison, checklist, management by objectives

Motivation and performance: application and appraisal of motivational theories and techniques, rewards and incentives, manager's role, self-motivational factors

2 **Be able to develop interpersonal and transferable skills**

Effective communication: verbal and non-verbal e.g. awareness and use of body language, openness and responsiveness, formal and informal feedback to and from colleagues; ICT as an effective communication medium; team meetings

Interpersonal skills: personal effectiveness; working with others; use of initiative; negotiating skills; assertiveness skills; social skills

Time management: prioritising workload; setting work objectives; making and keeping appointments; working steadily rather than erratically; time for learning; reliable estimate of task time

Problem solving: problem analysis; researching changes in the workplace; generating solutions; choosing a solution

3 **Understand the dynamics of working with others**

Working with others: nature and dynamics of team and group work; informal and formal settings; purpose of teams and groups e.g. long-term corporate objectives/strategy; problem solving and short-term development projects; flexibility/adaptability; team player

Teams and team building: selecting team members e.g. specialist roles, skill and style/approach mixes; identification of team/work group roles; stages in team development e.g. team building, identity, loyalty, commitment to shared beliefs, team health evaluation; action planning; monitoring and feedback; coaching skills; ethics; effective leadership skills e.g. setting direction, setting standards, motivating, innovative, responsive, effective communicator, reliability, consistency

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4 **Be able to develop strategies for problem solving**

Specification of the problem: definition of the problem; analysis and clarification

Identification of possible outcomes: identification and assessment of various alternative outcomes

Tools and methods: problem-solving methods and tools

Plan and implement: sources of information; solution methodologies; selection and implementation of the best corrective action e.g. timescale, stages, resources, critical path analysis

Evaluation: evaluation of whether the problem was solved or not; measurement of solution against specification and desired outcomes; sustainability

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Be able to determine own responsibilities and performance	1.1 develop a set of own responsibilities and performance objectives 1.2 evaluate own effectiveness against defined objectives 1.3 make recommendations for improvement 1.4 review how motivational techniques can be used to improve quality of performance
LO2 Be able to develop interpersonal and transferable skills	2.1 develop solutions to work-based problems 2.2 communicate in a variety of styles and appropriate manner at various levels 2.3 identify effective time management strategies
LO3 Understand the dynamics of working with others	3.1 explain the roles people play in a team and how they can work together to achieve shared goals 3.2 analyse team dynamics 3.3 suggest alternative ways to complete tasks and achieve team goals
LO4 Be able to develop strategies for problem solving.	4.1 evaluate tools and methods for developing solutions to problems 4.2 develop an appropriate strategy for resolving a particular problem 4.3 evaluate the potential impact on the business of implementing the strategy.

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Guidance

Links

This unit links with:

- *Unit 40: Personal and Professional Development*
- *Unit 46: Research Project*
- *Unit 53: Work-based Experience.*

It also links with the following Asset Skills cross-sectoral Employability Matrix:

- B2.4 Plan and manage time, money and other resources to achieve goals
- B3.3 Find and suggest new ways to achieve goals and get the job done and achieve goals
- B4.5 Plan for and achieve your learning goals
- C1.1 Understand the roles people play in a group and how you can best work with them
- C1.7 Lead or support and motivate a team to achieve high standards
- C2.6 Find new and creative ways to solve a problem.

Essential requirements

Access to a range of work-related exemplars (for example appraisal and development systems, team health checks, job descriptions, action plans, communication strategies etc) would be of assistance in delivering this unit. Case studies based on relevant sectors, workshops, career talks and work-based mentors would also be useful in the teaching and learning aspect of the unit.

Learners can generate assessment evidence through a range of possible activities including individual work placements, project management, research reports, development of case studies, the process of working with others (for example employee-supervisor roles, teamwork, group work) and everyday communication within the workplace.

Unit 18: Harmony and Arranging

Unit code: Y/601/1583

Level: 5

Credit value: 15

Unit aim

The aim of this unit is to enable learners to produce a variety of idiomatic melodic and rhythmic arrangements for different ensemble combinations.

Unit abstract

For any musician or composer to progress in music, it is vital for them to understand a variety of musical components. It is also important to build up an understanding of different musical styles and forms, whether they are to their own tastes or not. Having an appreciation of a form or style enables learners to work and compose within it, regardless of personal taste. Another significant area to highlight is the instrumentation and voicing of different pieces, as it is important to achieve the right 'balance' and texture within a piece of music.

However, the ability to rearrange a piece from one style to something totally different must also be considered. This can be 'modern' interpretations of songs or the reverse, for example Paul Anka's big band versions of songs (*Rock Swings*, 2005) including *Wonderwall* (*Oasis,* 1995) and *Smells Like Teen Spirit* (*Nirvana,* 1991).

The main aim of this unit is for learners to be able to produce a portfolio of contrasting compositions, demonstrating an appreciation of a variety of styles. It will cover section writing in two, three, four and five parts and also writing specifically for a rhythm section. The whole unit will be underpinned by a knowledge and understanding of 'jazz' and 'popular' music chord structures and chord progressions. It is important for the learner to hear and appreciate a wide selection of music so that they can compose and arrange in many different contexts.

Learning outcomes

On successful completion of this unit a learner will:

1 Be able to produce a portfolio of arrangements for a variety of ensembles in an assortment of styles

2 Understand different jazz and popular music harmony and notation conventions

3 Be able to apply appropriate arranging techniques

4 Be able to produce both recordings and live performances of their work.

Unit content

1 **Be able to produce a portfolio of arrangements for a variety of ensembles in an assortment of styles**

Instrumentation: ensemble e.g. two-part, three-part, four-part, five-part, rhythm section, instrumental and vocal ranges, instrumental and vocal combinations, timbre, tone colours, balance, blend

Voicings: chords e.g. closed, semi-open, open, voice leading, texture, three and four part clusters, polychords

Harmonisation: solutions e.g. chord tones, diatonic passing notes, chromatic passing notes, reharmonisation, chord substitution

Styles: idiomatic writing e.g. rock, pop, latin, jazz, world music, classical, contemporary

Presentation: accuracy e.g. hand music copying, computer music copying, full score, short score, parts, 'head' arrangement

2 **Understand different jazz and popular music harmony and notation conventions**

Basic theory: terminology e.g. intervals, key signatures, the cycle of fifths

Chords: theory e.g. chord symbols, chord progressions, chord/scale theory, slash chords

Scales: theory e.g. major scale modes and harmony, melodic minor scale modes and harmony, symmetrical scales, pentatonic scales

3 **Be able to apply appropriate arranging techniques**

Repetition and contrast: techniques e.g. repeating melodies and harmonic sections, contrasting orchestration between sections, countermelody, transposition, harmonic support

Variation and development: solutions e.g. melodic variation, change of style, harmonic substitution, development of ideas

Musical devices: tools e.g. riffs, motifs, vamps, forms, structures, melodic motion, licks, quotes, patterns, cliché chord patterns

4 **Be able to produce both recordings and live performances of their work**

Recording: studio recording; live recording; digital sequencing

Live performance: music copying; rehearsal; performance

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Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Be able to produce a portfolio of arrangements for a variety of ensembles in an assortment of styles	1.1 present a portfolio of arrangements using music publishing technology 1.2 present a range of instrumentation techniques in a portfolio of arrangements 1.3 use idiomatic voicings in a portfolio of arrangements 1.4 use appropriate idiomatic harmony for melodic lines within a portfolio of arrangements 1.5 present a range of musical styles in a portfolio of arrangements
LO2 Understand different jazz and popular music harmony and notation conventions	2.1 explain basic music theory 2.2 assess stylistically appropriate chord progressions 2.3 assess appropriate scales to apply to chords and vice versa
LO3 Be able to apply appropriate arranging techniques	3.1 show melodic and harmonic repetition and contrast in a portfolio of arrangements 3.2 show melodic and harmonic variation and development in a portfolio of arrangements 3.3 evaluate the use of a variety of musical devices in a portfolio of arrangements
LO4 Be able to produce both recordings and live performances of their work.	4.1 produce studio recordings of completed arrangements 4.2 produce live performances of completed arrangements.

Guidance

Links

This unit links with:

- *Unit 7: Aural Perception*
- *Unit 8: Band Rehearsal and Performance*
- *Unit 10: Composing for Film and Television*
- *Unit 11: Composition in Context*
- *Unit 19: Harmony and Composition*
- *Unit 20: Improvisation in Music*
- *Unit 31: Music Notation*
- *Unit 32: Music Performance Skills*
- *Unit 33: Music Performance Studies*
- *Unit 35: Music Studio Production*
- *Unit 48: Songwriting Techniques and Skills*
- *Unit 52: Studio Recording and Engineering.*

Essential requirements

Learners must have the opportunity to hear what their arrangements sound like. Access to other musicians for performance and recording must be provided, as well as one or more of the following, or similar, software applications: Cubase, Protage, Finale and Sibelius.

Employer engagement and vocational contexts

Learners should be encouraged to write songs in a specific style or to recognise local or national events. They could also write for specific musicians, either within their learning environment or for established performers. It may also be worth directing learners towards participation in national songwriting competitions.

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Unit 19: Harmony and Composition

Unit code: H/601/1652

Level: 4

Credit value: 15

Unit aim

The aim of this unit is to enable learners to develop and then apply skills in harmony and composition by creating and developing musical ideas in contrasting styles and forms.

Unit abstract

Harmony or 'backing' vocals often play a significant role as part of a successful or memorable piece of popular music. Research has suggested that people subconsciously latch on to the sound of different voices when hearing a song, as a kind of 'hook'. Additionally, composers and songwriters will often look to incorporate either innovative or familiar use of chords, chord progressions, modulations and textures in order to 'catch the ear' of their audience. Over the years, many composers in a variety of genres have used harmonic ideas and this unit is about recognising and developing these, as well as other contrapuntal conventions, in order for learners to integrate them within their compositions.

Learners will not be restricted in their compositional styles and, indeed, should be encouraged to compose pieces in different styles in order to build up a diverse portfolio. Developing a practical awareness and understanding of accepted harmonic and contrapuntal conventions will achieve this and so it is essential that learners hear and appreciate a wide cross-section of harmonic styles from a variety of musical eras. Additionally, they should become aware of what harmonic devices have been utilised within songs they may have been exposed to.

Learners will develop a practical understanding of harmonic conventions by studying chords, chord progressions and the use of modulation. Additionally, they will develop their use and awareness of contrapuntal techniques, such as the use of different figuration and voicing. Once these have been established, learners will have the skills required to create original compositions using these techniques.

Learning outcomes

On successful completion of this unit a learner will:

1 Understand harmonic conventions

2 Understand contrapuntal conventions

3 Be able to generate musical ideas

4 Be able to create a portfolio of original compositions.

Unit content

1 **Understand harmonic conventions**

Chords: types e.g. major, minor, modal, concords and discords, primary, secondary and chromatic chords, blue notes, 'sus' chords, triads, seventh chords, added chords, tone clusters, blues chords, substitution chords, chord symbols, pedals

Chord progressions: patterns e.g. chord progressions, 12-bar blues, cadences, blues patterns, bridge, turnaround, middle eight

Modulation: change key e.g. to major and minor and other related keys, cycle of fifths, chromatic alteration, enharmonic modulation

2 **Understand contrapuntal conventions**

Figuration and voicing: harmony e.g. two, three and four-part, countermelodies, doubling, spacing, broken chords, Alberti bass, arpeggios, licks and hooks

Imitation: techniques e.g. two-part, parallel and contrary motion, rounds, canons, counterpoint

Modulation: change key e.g. melody and countermelody modulations, harmonic structures, harmonic cliché

Texture: harmony e.g. monophonic, homophonic, polyphonic, drone, ground bass, riffs, ostinati, accompaniment, drum patterns, backbeat, layering, walking bass, stabs

3 **Be able to generate musical ideas**

Melodies and riffs: techniques e.g. scales and modes, phrases, single line, with and without accompaniment, passing notes, implied harmonic progression, middle eight

Thematic and motivic development: ideas e.g. rhythmic and melodic cells, sequences, tempo, dynamics, middle eight

Rhythmic: structure e.g. cells, phrases, syncopation, backbeat, polyrhythm, augmentation and diminution

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4 **Be able to create a portfolio of original compositions**

Styles: examples e.g. learners may compose in any style and need not restrict themselves to diatonic harmony

Forms: structures e.g. established, traditional, popular, contemporary, repetition and contrast, sound and silence

Instrumental and vocal combinations: blend e.g. timbre, tone colours, range, capabilities; classification e.g. acoustic, electronic, families, groups, instruments, voices

Transcription: scores e.g. chord charts, cue sheets, score writing, part writing, notation, music publishing software, transposition, graphic notation

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand harmonic conventions	1.1 justify the use of a range of chords 1.2 explain chord progressions 1.3 analyse different methods of modulation
LO2 Understand contrapuntal conventions	2.1 apply figuration, inversions and voicing effectively 2.2 explain different forms of imitation 2.3 explain techniques used in modulation 2.4 evaluate contrapuntal devices used in a range of different textures
LO3 Be able to generate musical ideas	3.1 generate melodies and riffs 3.2 apply thematic and motivic development 3.3 organise rhythmic structure competently
LO4 Be able to create a portfolio of original compositions.	4.1 create compositions in a number of styles 4.2 create compositions in a number of forms 4.3 use a variety of instrumental and vocal combinations 4.4 transcribe scores and parts accurately.

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Guidance

Links

This unit links with:

- *Unit 7: Aural Perception*
- *Unit 10: Composing for Film and Television*
- *Unit 11: Composition in Context*
- *Unit 12: Computer Music Composition and Production*
- *Unit 18: Harmony and Arranging*
- *Unit 20: Improvisation in Music*
- *Unit 31: Music Notation*
- *Unit 35: Music Studio Production*
- *Unit 48: Songwriting Techniques and Skills*
- *Unit 52: Studio Recording and Engineering.*

Essential requirements

Learners must have access to recording equipment with a piano or keyboard, facilities to play CDs and a whiteboard with manuscript.

There must be access to a wide selection of CDs. Resources for research must include the library, CD ROMs, CD collections and a specialist music library including scores. Learners must have access to practice rooms with keyboards or pianos and listening facilities. This unit provides opportunities for music technology to be incorporated; therefore a music technology studio with facilities to record, create and notate music is desirable. Computer software capable of notating music could be particularly useful: at the time of writing this includes programs such as Cubase, Protégé, Finale and Sibelius.

Employer engagement and vocational contexts

Learners should be encouraged to write songs in a specific style or to recognise local or national events. They could also write for specific musicians, either within their own learning environment or for established performers. It may also be worth directing them towards participation in national songwriting competitions.

Unit 20: Improvisation in Music

Unit code: M/601/1573

Level: 5

Credit value: 15

Unit aim

The aim of this unit is to enable learners to improvise musically by developing the knowledge, skills and techniques required in a systematic and sustainable way.

Unit abstract

Improvisation is the mainstay of many types of musical activity from jazz, through samba, to dance and MC'ing via composition and world music to classical and baroque cadenzas. Improvisation is often regarded as one of music's difficult areas and that you need virtuoso-like skills. But, just like many other techniques, the skills required to improvise can be learned and the route to improvisation can be seen as a series of steps.

Confidence comes from a number of sources – understanding the musical elements over which improvisation is to occur, the musical devices available to the performer, increasing ability on one's own chosen instrument, exposure to a range of styles (including analysis of the work of seminal figures) and a system of practice and rehearsal.

Improvisation can become a major tool within a musician's arsenal to sustain and develop their horizons and employment base. This involves stepped learning, passing through a stage where melodic lines are 'prepared' before arriving at the level where improvised performances can be tackled with minimum preparation. This unit provides access to these stages on the way to confident improvisation within a range of performance opportunities.

The use of other musicians during this developmental stage provides students with valuable experience in both giving and receiving musical direction during practice sessions. Improvisation should be encouraged across as broad a range of musical styles and genres as is possible and every opportunity to step outside the norm should be encouraged.

Learning outcomes

On successful completion of this unit a learner will:

1 Understand the relationship between musical elements and improvised material

2 Be able to develop individualised instrumental learning programmes

3 Be able to practise and rehearse improvisation

4 Be able to improvise from musical resources.

Unit content

1 **Understand the relationship between musical elements and improvised material**

Musical elements: chord structure; extensions; scales; modes; arpeggios; tempo; rhythmic elements; dynamics; ranges; arrangement; common patterns

Improvised material: examples; analysis of phrases; runs and licks; genre; mood; pace; development; expression; tone; instrumentation; performance techniques; dynamics; dissonance; chromatics; quotes; patterns and repetition

2 **Be able to develop individualised instrumental learning programmes**

Learning programme: identification of personal strengths and weaknesses; goals and target setting e.g. SMART targets; identifying resources for practice e.g. sequenced backings, clicks; establishing monitoring mechanisms; milestones

Personal improvement: practice regimes and discipline; developing and using resources for practice e.g. musical, physical; working with others; monitoring and corrective action; working with range of keys, tempos and rhythms; demonstrating progress

3 **Be able to practise and rehearse improvisation**

Practise: selecting and developing range of progressions and grooves; development of style; graduated development e.g. tempo, complexity; instrumental technique; tone; dynamics; mood; analysis and evaluation of own work

Rehearse: working with ensembles and with generated backings; giving/receiving musical direction; use of chord charts; lead sheets

4 **Be able to improvise from musical resources**

Resources: musical e.g. backing tracks, band, charts, symbols, repeats, time bars, codas

Quality considerations: arrangement; preparation time; run-throughs; development of improvisation; technique e.g. control, style, suitability, fluency; confidence; instrumental technique e.g. accuracy, clarity, tone, variety, dynamic elements

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Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand the relationship between musical elements and improvised material	1.1 explain how a range of scales, modes and arpeggios are constructed 1.2 describe the relationship between improvised phrases and the chord structure over which it is played 1.3 analyse the structure of improvisations in terms of dynamics, instrumental technique, tone and development
LO2 Be able to develop individualised instrumental learning programmes	2.1 produce an analysis of currently held musical strengths and weaknesses 2.2 set realistic targets and strategies within quality and time dimensions 2.3 develop effective progress monitoring systems 2.4 demonstrate improvement in identified target area(s)
LO3 Be able to practise and rehearse improvisation	3.1 select musical material for improvisation practice 3.2 evaluate individual improvisation performance 3.3 control practice sessions when working with other musicians 3.4 evaluate ensemble improvisation performance
LO4 Be able to improvise from musical resources.	4.1 improvise over supplied material demonstrating appropriate control over melodic factors 4.2 improvise over supplied material demonstrating appropriate stylistic considerations 4.3 improvise over supplied material demonstrating control of instrument and technique.

Guidance

Links

This unit links with:

- *Unit 7: Aural Perception*
- *Unit 8: Band Rehearsal and Performance*
- *Unit 18: Harmony and Arranging*
- *Unit 19: Harmony and Composition*
- *Unit 21: Keyboard Skills*
- *Unit 31: Music Notation*
- *Unit 32: Music Performance Skills*
- *Unit 33: Music Performance Studies*
- *Unit 47: Singing Techniques and Styles*
- *Unit 48: Songwriting Techniques and Skills*
- *Unit 54: World Music Composition and Performance.*

Essential requirements

The main physical requirements for this unit are access to practice areas suitable for solo and band performance, a range of recorded examples of improvised material, and computer software for the generation of backing tracks with which to practise.

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Unit 21: Keyboard Skills

Unit code: A/601/1575

Level: 4

Credit value: 15

Unit aim

The aim of this unit is to enable learners to use music keyboards in a variety of practical applications as well as to aid the understanding of the principles of music.

Unit abstract

The keyboard is an integral instrument of modern music, not only as a practical tool that unlocks theory and harmony but also as a primary input source for creation using technology. It involves a study of performance works, reading and sight-reading, creative techniques in performance and the application of keyboard skills using music technology.

This unit acknowledges that the majority of learners will not be proficient in keyboard skills.

Keyboard skills offer learners practical opportunities to use the keyboard in both a performance, through the realisation of rehearsed works, and a creative context that demonstrates the instrument as a key tool in music technology.

The unit is underpinned by a theoretical knowledge of keyboard techniques that is applied in practical situations. Learners will perform selected works that demonstrate a range of keyboard techniques, including pitch and rhythmic accuracy, dynamics and phrasing. They will explore performance techniques, reflect on their individual proficiency at the keyboard, adapt practical methods to suit a range of works and solve problems that arise when preparing works for performance. There is also the development of practical skills that are not reliant on a score, including playing by ear and aspects of improvisation.

This unit offers further opportunities that will benefit creative units requiring composition using programming or music technology. Learners will develop skills in real-time performance, including arrangement using the keyboard, playing to a click and imitating the performance attributes of other instruments.

On completion of this unit, learners will be able to perform a repertoire of short keyboard pieces from traditional score, understand current interpretative techniques involved in keyboard practice and generate creative arrangements using the keyboard with music technology.

Learning outcomes

On successful completion of this unit a learner will:

1 Be able to perform a repertoire of short solo keyboard works

2 Be able to develop keyboard skills using sustained rehearsal schedules

3 Be able to perform keyboard works using creative practical techniques

4 Be able to demonstrate keyboard applications in creative music technology.

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Unit content

1 **Be able to perform a repertoire of short solo keyboard works**

Repertoire: appropriate selection of a range of works; stylistic variety; historical and current stylistic conventions; notation analysis e.g. phrasing, dynamics performance attributes; modulation and chromaticism; harmonic and modal progressions

Performance: accuracy in practice e.g. rhythm and pitch; theory and research in practice; acknowledgement of score conventions e.g. dynamics, markings, music language; communication; continuity

Techniques: fingering; dynamics and phrasing; touch; use of pedals; interpretation e.g. metre, feel, tempo

2 **Be able to develop keyboard skills using sustained rehearsal schedules**

Development of skills: hand coordination; melody and accompaniment; rhythmic pulse and metre; accuracy to score; stylistic accuracy

Practice routine: action plan; schedule; theory into practice; reflection and review; feedback; working to targets

3 **Be able to perform keyboard works using creative practical techniques**

Improvisation: interpretation of chord symbols and patterns; scales, modes and underlying chords; prepared and unprepared music; performing with accompaniment; elaborations on a given melody/rhythmic pattern; stylistic interpretation e.g. historical, jazz and blues, popular music; creativity and adaptation

Playing by ear: aural recognition; notation and chord symbols; standard chord progressions; chord voicing, bass patterns and the coordination of LH/RH; scales and modes; intervals; melodic devices e.g. sequential repetition, syncopation, rhythm and pitch; harmonic techniques e.g. chord progressions, transposition; modulation; listening into practice

4 **Be able to demonstrate keyboard applications in creative music technology**

Idiomatic conventions: imitation of instrument performance characteristics e.g. drum kit, trumpet, guitar, string section

Performance using technology: sequencing e.g. drum map, real-time input, playing to click; recording a score using the keyboard; multi-tracking; layering of parts; arrangement; selection of sampled voices/MIDI; virtual performance

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Be able to perform a repertoire of short solo keyboard works	1.1 prepare a repertoire of varied works for performance 1.2 perform selected works effectively 1.3 use the appropriate performance techniques
LO2 Be able to develop keyboard skills using sustained rehearsal schedules	2.1 show how new skills are developed and used 2.2 realise works through sustained practice
LO3 Be able to perform keyboard works using creative practical techniques	3.1 perform works that include elements of improvisation effectively 3.2 perform a varied programme of solo and ensemble music by ear
LO4 Be able to demonstrate keyboard applications in creative music technology.	4.1 perform effectively using appropriate idiomatic conventions 4.2 create arrangements using music technology.

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Guidance

Links

This unit links with:

- *Unit 1: Accessible Music Technology*
- *Unit 7: Aural Perception*
- *Unit 18: Harmony and Arranging*
- *Unit 19: Harmony and Composition*
- *Unit 20: Improvisation in Music*
- *Unit 28: Music Composition Techniques*
- *Unit 31: Music Notation*
- *Unit 32: Music Performance Skills*
- *Unit 33: Music Performance Studies*
- *Unit 36: Music Technology*
- *Unit 39: Orchestration*
- *Unit 48: Songwriting Techniques and Skills.*

Essential requirements

Learners must have access to practice facilities with a piano or keyboard, recording and music technology equipment, facilities to play recorded music, a collection of scores and lead sheets, 'play along' recordings and ear-training software.

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Unit 22: Live Sound for Large Venues

Unit code: R/601/1579

Level: 5

Credit value: 15

Unit aim

The aim of this unit is to enable learners to operate live sound systems in medium and large venues by developing a thorough grounding in the theory and practice of live sound.

Unit abstract

Live sound is an ideal area to develop transferable skills such as mixing and microphone techniques, communication and organisational skills, professional practice and the ability to work safely in a musical environment. It offers many routes to employment, such as permanent engineer at a specific venue, freelance engineer working at various venues and with touring bands, running audio-visual systems at corporate events, theatre work and installation and servicing of sound equipment.

The unit is designed to help develop the theoretical and practical skills that are appropriate to the set-up and installation of sound systems. Learners will acquire the knowledge required to understand sound system design in relation to venue type and programme material. They will also understand equipment specifications for a wide range of venues and performers and will have confidence in the operation of different types of system. On completion, learners will be able to safely operate sound systems in a range of venues and have a confident grasp of the practical and theoretical knowledge required to successfully install sound equipment in small to medium-size venues.

Live sound practice helps to reinforce skills developed in units based around sound recording, listening skills, acoustics and music business. Other relevant knowledge includes health and safety, musical interpretation and communication skills.

This unit should be treated as a continuation of previous experience in the subject of live sound. Prior knowledge is required of the use of microphones, mixing desks, sound processors, amplification and speakers.

Learning outcomes

On successful completion of this unit a learner will:

1 Understand sound system design theory

2 Understand sound system requirements for a wide range of medium and large scale performance circumstances

3 Understand medium and large scale live sound equipment specifications

4 Be able to soundcheck and operate live sound systems.

Unit content

1 **Understand sound system design theory**

Acoustic theory: sound e.g. the decibel, sound level, wave propagation, diffraction of sound, loudness, effects of temperature, wind and humidity, inverse square law, loudness contours, room acoustics, standing waves, phase summation and cancellation, absorption, reverberation, critical distance

Electrical theory: electronics e.g. Ohm's Law, resistance, capacitance, the decibel and signal levels, units, voltage and current, signal levels and impedance, balanced and unbalanced connections, grounding, transformers, mains voltage, AC safety, power requirements, distribution

System architecture: terminology e.g. signal flow, system logic, bandwidth, groupings, interfacing, ground loops, types of cable, balanced versus unbalanced cabling, loudspeaker cables, multi-core cables, cable losses, digital interfacing, amplifier control systems, system equalisation, loudspeaker placement, clusters, distributed systems, fills, suspension systems, trussing, zoning considerations

2 **Understand sound system requirements for a wide range of medium and large scale performance circumstances**

Closed space: indoor e.g. venue size, acoustic properties, loudness requirements, feedback and potential system gain, sound field calculations, frequency response, time delay, speech legibility, critical distance, health and safety

Open air: outdoor e.g. system gain requirements, inverse square law, wind, temperature, humidity, time delay, weather protection, cable runs, health and safety

Acoustic measurement: sound pressure level; absorption; standing waves; reverberation; room response; test equipment; software analysis; room response plots

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3 **Understand medium and large scale live sound equipment specifications**

Amplifiers: specifications e.g. frequency response, dynamic range, output power, slew rate, harmonic distortion, bridged operation, clipping effects, electrical power and amplifier gain, impedance, load, relationship between power and SPL

Loudspeakers: specifications e.g. power handling, frequency response, sensitivity, impedance, directional characteristics, common acoustic transducers, electromagnetic types, piezoelectric types, low frequency drivers, low frequency enclosures, high frequency drivers, high frequency horns, active and passive crossovers

Microphones: types; frequency response; sensitivity; pick-up patterns; phantom power; impedance; transient response; proximity effect; pop filters and shock mounts; lavaliere; bugs and pick-ups; shotgun; radio microphones

Mixing and sound processing equipment: mixing console e.g. inputs and outputs, microphone and line amplifiers, signal-to-noise ratio, dynamic range, distortion, nominal operating levels; impedance e.g. monitor mixers, microphone splitters; processors e.g. compressors, equalisers, reverberation and delay units, feedback eliminators, control equipment

4 **Be able to soundcheck and operate live sound systems**

Tuning the system: speaker alignment and placement; ringing the system e.g. appropriate reference material, graphic equalisers, feedback; elimination; crossover set-up; speaker positioning; monitor positioning; amplifier levels

Musical instruments: considerations e.g. approaching different types, acoustic versus electric instruments, drums, guitars, guitar amplifiers, DI boxes, pick-ups and 'bugs', the human voice

Front of house operation: set-up e.g. line levels, mic levels, pan, routing, processors, EQ, metering, speaker positioning, amplifier levels, crossover frequencies, feedback elimination, graphic equalisation; mixing e.g. interpretation, aesthetics, style, dynamics, levels, mixing, metering, PFL, EQ, processors, feedback; performance types e.g. rock and pop music, classical music and opera, drama, dance, musical theatre, spoken word, music playback

Communication: instructions e.g. stage plan, performer's brief, promoter's brief, venue requirements, running orders, cue lists, visual clues

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand sound system design theory	1.1 explain acoustic theory relating to live sound systems 1.2 explain electrical theory relating to live sound design 1.3 analyse approaches to the design of sound system installations in a range of venues
LO2 Understand sound system requirements for a wide range of medium and large scale performance circumstances	2.1 select and justify the sound system requirements of indoor venues 2.2 select and justify the sound reinforcement requirement of outdoor venues 2.3 select and justify appropriate techniques for the acoustic measurement of spaces
LO3 Understand medium and large scale live sound equipment specifications	3.1 evaluate the specifications of different amplifiers 3.2 assess the capabilities of a range of loudspeaker types 3.3 evaluate different microphone systems for live sound applications 3.4 evaluate the suitability of various mixing and sound processing equipment
LO4 Be able to soundcheck and operate live sound systems.	4.1 create an on-stage mix suitable to performers' needs 4.2 create a front-of-house mix suitable for the style of music 4.3 demonstrate effective communication.

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Guidance

Links

This unit links with:

- *Unit 2: Acoustics*
- *Unit 23: Live Sound for Small Venues*
- *Unit 24: Live Sound Systems Specification and Operation*
- *Unit 27: The Music Business in the 21st Century*
- *Unit 35: Music Studio Production*
- *Unit 37: Music, Health and the Law*
- *Unit 42: Preparation, Process and Production in the Creative Arts*
- *Unit 43: Principles of Musical Sound*
- *Unit 52: Studio Recording and Engineering.*

This unit also has links with the following National Occupational Standards:

Technical Theatre

- CPD1 Improving your skills
- CPD2b Ensure that you and your team keep up to date with the technical and production areas of the live arts
- HS1 Working safely
- CPD4a Contributing to technical production work for performance
- CPD4b Overseeing technical production work for performance
- HS2 Assessing risks (HSS6)
- HS5 Controlling risks (ENTO HSS2)
- HS3b Selecting and using safe systems for working at height (RC3)
- TP3.6a Contribute to the planning of sound requirements for a production (C2)
- TP3.6b Planning sound requirements for a production (C2)
- TP8.4 Setting up and checking sound equipment (C6)
- TP14.1a Getting in, fitting up and getting out (M4)
- TP20.4b Supervising sound operation for a live performance in the theatre
- TP23.1 Maintaining buildings or equipment (C12)
- TP5.6 Sourcing sound equipment
- MTP2 Cleaning up own work area.

Essential requirements

Learners must have access to medium to large venues and sound systems in order to acquire hands-on experience.

Employer engagement and vocational contexts

Centres should develop links with local venues in order to give learners a wider experience of acoustic spaces and sound system specification. Links with employers are beneficial to the delivery of the programme for work experience and future employment.

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Unit 23: Live Sound for Small Venues

Unit code: R/601/1582

Level: 4

Credit value: 15

Unit aim

The aim of this unit is to enable learners to operate live sound systems in small venues by developing technical skills supported by relevant theory.

Unit abstract

Live sound is an ideal area to develop transferable skills such as mixing and microphone techniques, communication and organisational skills, professional practice and the ability to work safely in a musical environment. It offers many routes to employment, such as permanent engineer at a specific venue, freelance engineer working at various venues and with touring bands, running audio-visual systems at corporate events, theatre work and installation and servicing of sound equipment.

The unit is designed to develop the practical skills required to provide the sound engineering services appropriate to the running of live events. Learners will acquire the competencies to set up basic sound systems, run soundchecks, run concerts, communicate with clients and understand elements of theory relevant to these tasks. On completion, learners will be able to safely operate sound systems in small to medium-size venues, working with a range of programme material.

Live sound practice helps to reinforce skills developed in units based around sound recording, listening skills, acoustics and music business. Other relevant knowledge includes health and safety, musical interpretation and communication skills.

The unit should be regarded as a starting point for the subject of live sound. No prior knowledge is required and the unit can be treated as an introduction to the use of microphones, mixing desks, sound processors, amplification and speakers.

Learning outcomes

On successful completion of this unit a learner will:

1 Understand the theory required to operate sound systems in small venues

2 Understand the type of equipment, connections and set-up procedures required for small sound systems

3 Be able to soundcheck and communicate with performers

4 Be able to operate live sound systems to facilitate the performer's communication with the audience.

Unit content

1 **Understand the theory required to operate sound systems in small venues**

Health and safety: regulations; sound levels and exposure; lifting safely; basic electrical safety; proper grounding; public safety; artist safety; risk assessment; rigging; hearing protection

Electrical theory: electronics e.g. mains voltage, current, power, input and output impedance, root mean square (RMS), peak, noise, transformers, distortion, grounding and ground loops, phase, troubleshooting

Acoustic theory: sound e.g. decibel and sound levels, inverse square law, sound pressure level (SPL), loudness, dynamic range, absorption, diffusion, standing waves, reverberation, room equalisation

2 **Understand the type of equipment, connections and set-up procedures required for small sound systems**

Microphones: types and properties; frequency response; sensitivity; safe handling and set-up; placement

Cables and connectors: e.g. balanced versus unbalanced cables, mains cables and connectors, speaker cables, multi-core cables, stage-box; safe cabling and installation, coiling and storing cables

Mixing and processing equipment: front of house and monitor mixing console e.g. metering, gain staging, panning, routing, auxiliary channels, pre-fade listen (PFL); dynamic processors e.g. effects units, equalisers, feedback eliminators; playback equipment; crossovers

Loudspeakers: specification e.g. power rating, impedance, sensitivity, directivity; placement e.g. coverage, main system, fills, monitors

Amplifiers: specification e.g. power rating, impedance; matching with loudspeakers

3 **Be able to soundcheck and communicate with performers**

Stage set-up: health and safety e.g. cabling, power sources, liquids, earth loops, sound levels, positioning of equipment, access

Musical instruments: considerations e.g. approaching different types, acoustic versus electric instruments, drums, guitars, the human voice, keyboards, brass, strings, amplifiers, DI boxes, microphones, cables

Monitor set-up: e.g. on-stage levels, monitor positioning, feedback elimination, graphic equalisation, amplifier levels

Front of house operation: set-up e.g. line levels, mic levels, pan, routing, processors, equalisation (EQ), metering, speaker positioning, amplifier levels, crossover frequencies, feedback elimination, graphic equalisation

Communication: instructions e.g. stage plan, performer's brief, promoter's brief, venue requirements, running orders, cue lists

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4 **Be able to operate live sound systems to facilitate the performer's communication with the audience**

Monitor mixing: e.g. headphones, after fader listen (AFL), PFL, levels, feedback

Front of house operations: mixing e.g. interpretation, aesthetics, style, dynamics, levels, mixing, metering, PFL, EQ, processors, feedback

Communication: instructions e.g. visual cues, cue lists

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand the theory required to operate sound systems in small venues	1.1 justify appropriate health and safety considerations 1.2 explain relevant electrical theory 1.3 explain relevant acoustical theory
LO2 Understand the type of equipment, connections and set-up procedures for small sound systems	2.1 assess amplifiers and speakers for live sound applications 2.2 assess mixing and sound processing equipment for live sound applications 2.3 evaluate microphones and DI boxes for a range of applications 2.4 assess appropriate connections relative to signal type and level
LO3 Be able to soundcheck and communicate with performers	3.1 set up stages taking health and safety into account 3.2 use microphones, DI boxes and associated cabling 3.3 apply the correct procedures for monitor and front-of-house set-up 3.4 demonstrate appropriate communication skills
LO4 Be able to operate live sound systems to facilitate the performer's communication with the audience.	4.1 create on-stage mixes taking into consideration the performer's needs 4.2 create front-of-house mixes suitable for the style of music 4.3 demonstrate effective communication.

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Guidance

Links

This unit links with:

- *Unit 2: Acoustics*
- *Unit 22: Live Sound for Large Venues*
- *Unit 24: Live Sound Systems Specification and Operation*
- *Unit 27: The Music Business in the 21st Century*
- *Unit 35: Music Studio Production*
- *Unit 37: Music, Health and the Law*
- *Unit 42: Preparation, Process and Production in the Creative Arts*
- *Unit 43: Principles of Musical Sound*
- *Unit 52: Studio Recording and Engineering.*

This unit also has links with the following National Occupational Standards:

Technical Theatre

- CPD1 Improving your skills
- CPD2b Ensure that you and your team keep up to date with the technical and production areas of the live arts
- HS1 Working safely
- CPD4a Contributing to technical production work for performance
- CPD4b Overseeing technical production work for performance
- HS2 Assessing risks (HSS6)
- HS5 Controlling risks (ENTO HSS2)
- HS3b Selecting and using safe systems for working at height (RC3)
- TP3.6a Contribute to the planning of sound requirements for a production (C2)
- TP3.6b Planning sound requirements for a production (C2)
- TP8.4 Setting up and checking sound equipment (C6)
- TP14.1a Getting in, fitting up and getting out (M4)
- TP20.4b Supervising sound operation for a live performance in the theatre
- TP23.1 Maintaining buildings or equipment (C12)
- TP5.6 Sourcing sound equipment
- MTP2 Cleaning up own work area.

Essential requirements

Although this unit requires only access to small venues, learners must be exposed to a range of live performance environments and sound reinforcement equipment.

It is important that learners are given the opportunity to practise and experiment with a range of sound system components of appropriate quality. Although some of this unit is theoretical, learners must be given the opportunity to apply theoretical knowledge in a practical context.

Employer engagement and vocational contexts

Centres should develop links with local venues in order to give learners a wider experience of acoustic spaces and sound system specifications. Links with employers are beneficial to the delivery of the programme for work experience and future employment.

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Unit 24: Live Sound Systems Specification and Operation

Unit code: R/601/1761

Level: 5

Credit value: 15

Unit aim

The aim of this unit is to enable learners to operate live sound systems in medium and large venues by developing an understanding of the relevant theory and equipment specifications.

Unit abstract

Live sound is an ideal area to develop transferable skills such as mixing and microphone techniques, communication and organisational skills, professional practice and the ability to work safely in a musical environment. It offers many routes to employment, such as permanent engineer at a specific venue, freelance engineer working at various venues and with touring bands, running audio-visual systems at corporate events, theatre work and installation and servicing of sound equipment.

The unit is designed to help develop the theoretical and practical skills that are appropriate to the set-up and installation of sound systems. Learners will acquire the knowledge to understand sound system design in relation to venue type and programme material. They will also understand equipment specifications for a wide range of venues and performers and will have confidence in the operation of different types of system. On completion, learners will be able to safely operate sound systems in a range of venues and have a confident grasp of the practical and theoretical knowledge required to successfully install sound equipment in small to medium sized venues.

Live sound practice helps to reinforce skills developed in units based around sound recording, listening skills, acoustics and music business. Other relevant knowledge includes health and safety, musical interpretation and communication skills.

This unit should be treated as a continuation of previous experience in the subject of live sound. Prior knowledge is required in the use of microphones, mixing desks, sound processors, amplification and speakers.

Learning outcomes

On successful completion of this unit a learner will:

1 Understand sound system design theory

2 Understand sound system requirements for a wide range of performance circumstances

3 Understand equipment specifications

4 Be able to soundcheck and operate live sound systems.

Unit content

1 **Understand sound system design theory**

Acoustic theory: sound e.g. decibel, sound level, wave propagation, diffraction of sound, loudness, effects of temperature, wind and humidity, inverse square law, loudness contours, room acoustics, standing waves, phase summation and cancellation, absorption, reverberation, critical distance

Electrical theory: electronics e.g. Ohm's Law, resistance, capacitance, the decibel and signal levels, units, voltage and current, impedance, balanced and unbalanced connections, grounding, transformers, mains voltage, AC safety, power requirements, distribution

System architecture: terminology e.g. signal flow, system logic, bandwidth, groupings, interfacing, ground loops, types of cable, balanced versus unbalanced cabling, loudspeaker cables, multi-core cables, cable losses, digital interfacing, amplifier control systems, system equalisation, loudspeaker placement, clusters, distributed systems, fills, suspension systems, trussing, zoning considerations

2 **Understand sound system requirements for a wide range of performance circumstances**

Closed space: indoors e.g. venue size, loudness requirements, feedback and potential system gain, acoustic properties e.g. sound field calculations, frequency response, time delay, speech legibility, critical distance; health and safety

Open air: outdoors e.g. system gain requirements, inverse square law, wind, temperature, humidity, time delay, weather protection, cable runs, health and safety

Acoustic measurement: sound pressure level; absorption; standing waves; reverberation; room response; test equipment e.g. software analysis, room response plots

3 **Understand equipment specifications**

Amplifiers: specifications e.g. frequency response, dynamic range, output power, slew rate, harmonic distortion, bridged operation, clipping effects, electrical power and amplifier gain, impedance, load, relationship between power and SPL

Loudspeakers: specifications e.g. power handling, frequency response, sensitivity, impedance, directional characteristics, common acoustic transducers, electromagnetic types, piezoelectric types, low frequency drivers, low frequency enclosures, high frequency drivers, high frequency horns, active and passive crossovers

Microphones: types; frequency response; sensitivity; pick-up patterns; phantom power; impedance; transient response; radio microphones

Mixing and sound processing equipment: mixing console e.g. inputs and outputs, microphone and line amplifiers, signal-to-noise ratio, dynamic range, distortion, nominal operating levels; impedance e.g. monitor mixers, microphone splitters; processors e.g. compressors, equalisers, reverberation and delay units, feedback eliminators, control equipment

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4 **Be able to soundcheck and operate live sound systems**

Tuning the system: speaker alignment and placement; ringing the system e.g. appropriate reference material, graphic equalisers, feedback; elimination; crossover set-up; speaker positioning; monitor positioning; amplifier levels

Musical instruments: considerations e.g. approaching different types, acoustic versus electric instruments, drums, guitars, guitar amplifiers, DI boxes, pick-ups and 'bugs', the human voice

Front-of-house operation: set-up e.g. line levels, mic levels, pan, routing, processors, EQ, metering, speaker positioning, amplifier levels, crossover frequencies, feedback elimination, graphic equalisation; mixing e.g. interpretation, aesthetics, style, dynamics, levels, mixing, metering, PFL, EQ, processors, feedback; performance types e.g. rock and pop music, classical music and opera, drama, dance, musical theatre, spoken word, music playback

Communication: instructions e.g. stage plan, performer's brief, promoter's brief, venue requirements, running orders, cue lists, visual clues

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand sound system design theory	1.1 explain acoustic theory relating to live sound systems 1.2 explain electrical theory relating to live sound design 1.3 analyse approaches to the design of sound system installations in a range of venues
LO2 Understand sound system requirements for a wide range of performance circumstances	2.1 analyse the sound system requirements of indoor venues 2.2 analyse the sound reinforcement requirements of outdoor venues 2.3 select appropriate techniques for the acoustic measurement of spaces
LO3 Understand equipment specifications	3.1 evaluate the specifications of different amplifiers 3.2 assess the capabilities of a range of loudspeaker types 3.3 compare different microphone systems for live sound applications 3.4 evaluate the suitability of various mixing and sound processing equipment
LO4 Be able to soundcheck and operate live sound systems.	4.1 create an on-stage mix suitable to performers' needs 4.2 create a front-of-house mix suitable for the style of music 4.3 demonstrate effective communication.

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Guidance

Links

This unit links with:

- *Unit 2: Acoustics*
- *Unit 22: Live Sound for Large Venues*
- *Unit 23: Live Sound for Small Venues*
- *Unit 27: The Music Business in the 21st Century*
- *Unit 35: Music Studio Production*
- *Unit 37: Music, Health and the Law*
- *Unit 42: Preparation, Process and Production in the Creative Arts*
- *Unit 43: Principles of Musical Sound*
- *Unit 52: Studio Recording and Engineering.*

This unit also has links with the following National Occupational Standards:

Technical Theatre

- CPD1 Improving your skills
- CPD2b Ensure that you and your team keep up to date with the technical and production areas of the live arts
- HS1 Working safely
- CPD4a Contributing to technical production work for performance
- CPD4b Overseeing technical production work for performance
- HS2 Assessing risks (HSS6)
- HS5 Controlling risks (ENTO HSS2)
- HS3b Selecting and using safe systems for working at height (RC3)
- TP3.6a Contribute to the planning of sound requirements for a production (C2)
- TP3.6b Planning sound requirements for a production (C2)
- TP8.4 Setting up and checking sound equipment (C6)
- TP14.1a Getting in, fitting up and getting out (M4)
- TP20.4b Supervising sound operation for a live performance in the theatre
- TP23.1 Maintaining buildings or equipment (C12)
- TP5.6 Sourcing sound equipment
- MTP2 Cleaning up own work area.

Essential requirements

Theoretical delivery for this unit can be classroom based. However, learners must have access to medium to large venues and sound systems in order to acquire hands-on experience. Learners should develop their theory understanding through practical application. Learners must be given the opportunity to practise and experiment with a range of sound-reinforcement system components of appropriate quality.

Employer engagement and vocational contexts

Centres should develop links with local venues to give learners a wider experience of acoustic spaces and sound system specification.

Links with employers are beneficial to the delivery of the programme for work experience and future employment.

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Unit 25: Managing a Creative Business

Unit code: A/601/1673

Level: 4

Credit value: 15

Unit aim

The aim of this unit is to enable learners to manage a small business in the creative arts sector by examining the personal and professional skills required.

Unit abstract

This unit looks into the skills required for small businesses to survive in the contemporary arts world. It gives learners the opportunity to assess themselves to see if they have the necessary skills. Arts businesses tend to be small or medium enterprises, and a large number of arts professionals are self-employed sole traders. This unit seeks to encourage learners to progress into self-employment without gaps in the necessary skills to make a success of their enterprise. It also gives learners the opportunity to investigate how such enterprises may be structured, funded and managed.

Learning outcomes

On successful completion of this unit a learner will:

1 Understand the structures of small businesses in the arts sector

2 Understand sources of funding and the support available to small businesses

3 Be able to apply financial administration techniques important to small business enterprises

4 Understand management issues relevant to small business enterprises.

Unit content

1 **Understand the structures of small businesses in the arts sector**

Structures: business structures; sole traders; partnerships; concept of unlimited and limited liability; limited companies

Role of small business: small businesses in the arts and their inter-relationships in the industry; niche; expertise

Personal structures: role and responsibilities of sole traders; partners; directors of small limited liability companies

Personal skills: time management; financial and market awareness; commitment; assertiveness; communication; planning; target setting; problem solving and decision-making

2 **Understand sources of funding and the support available to small businesses**

Start-up funding: loans; overdrafts; government grants and loan schemes; start-up schemes; local and regional variations

Ongoing sources: special project funding; lottery funding; Arts Councils; European sources; other specialist sources; employment subsidies

Supporting relevant organisations: RABs; local, regional and governmental departments; Arts Councils; local authorities; unitary authorities; public organisations; sponsorship

Role of relevant organisations: services offered; clients; aims and objectives

3 **Be able to apply financial administration techniques important to small business enterprises**

Recording financial transactions: simple systems for recording financial transactions in a small business environment

Income tax, national insurance (NI) and VAT: liabilities in respect of tax, NI and VAT; calculating likely contributions/demands; documentation relating to tax, NI and VAT; implications of self-assessment

Credit control: recognising the importance of credit control; simple credit control techniques relevant to small business; cash flow forecast

4 **Understand management issues relevant to small business enterprises**

Use of time: time management; demands

Limits to growth: availability of personnel; implications for employing personnel; limitations of market; budgetary constraints; complying with legislation

Financial forecasts: role; cash-flow forecasts; the value of targets and associated strategies; business planning; marketing; business development; target markets/audiences

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Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand the structures of small businesses in the arts sector	1.1 explain the structures of businesses in the arts 1.2 explain the roles and responsibilities of sole traders, partners and directors 1.3 explain how small businesses inter-relate with other businesses, large and small 1.4 analyse the importance of small businesses to the arts sector 1.5 evaluate personal levels of existing competence of enterprise skills
LO2 Understand sources of funding and the support available to small businesses	2.1 research appropriate sources of funding for ongoing business needs, through relevant case studies 2.2 evaluate sources of funding for new small business enterprises 2.3 research the various organisations which may support small business enterprises in the arts sector 2.4 evaluate the support which these organisations might provide
LO3 Be able to apply financial administration techniques important to small business enterprises	3.1 set up systems for the recording of financial transactions 3.2 calculate likely liabilities in respect of tax, NI and VAT
LO4 Understand management issues relevant to small business enterprises.	4.1 explain the demands likely to be made of small business proprietors in the arts sector 4.2 evaluate the potential impact of identified external factors on small business development 4.3 evaluate business plans relevant to small businesses in the arts.

Guidance

Links

This unit links with:

- *Unit 11: Composition in Context*
- *Unit 26: Marketing the Creative Arts*
- *Unit 27: The Music Business in the 21st Century*
- *Unit 42: Preparation, Process and Production in the Creative Arts*
- *Unit 47: Singing Techniques and Styles.*

This unit also has links with the following National Occupational Standards:

Community Arts

- CA2 Provide direction and leadership for your team
- CA7 Assist in pitching for community arts work
- CA8 Obtain and use research information
- CA9 Keep up to date with developments within the arts
- CA12 Understand how your community arts organisation can meet market needs and satisfy customer's needs
- CA16 Embracing diversity in your service provision.

Essential requirements

In addition to materials generally available, learners must have access to business support services such as Business Link and local chambers of commerce. Resources vary according to the nature of the projects undertaken. Resources could include transport, outdoor venues, sound reproduction equipment, visual aids and art materials.

Employer engagement and vocational contexts

This unit lends itself to visiting lecturers and speakers. Learners should have opportunities to network, explore and go out into the world of work and see what entrepreneurs in the arts are achieving and how businesses in the commercial marketplace face the day-to-day issues which arise. Learners should be encouraged to study real situations where possible and a case study approach would be ideal. Learners would also benefit from periods of work experience and acting as voluntary interns.

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Unit 26: Marketing the Creative Arts

Unit code: D/601/1780

Level: 5

Credit value: 15

Unit aim

The aim of this unit is to enable learners to understand and use the theory and practice of marketing to promote their products to new and wider audiences.

Unit abstract

In this increasingly competitive sector – where self-employment and portfolio careers are often the norm – understanding marketing theory and practice can mean the difference between success and failure for audiences at live performances and for sales of recordings.

Musicians can no longer rely on the mechanisms of the traditional arts business to tackle their marketing for them and – as the tools of modern marketing are made more available to the self-publicising artist/band – an understanding of this important field becomes vital.

This unit seeks to instil a blend of existing thought on marketing with the skills necessary to develop promotional campaigns – from identification of audiences through to use of the latest technology to access them.

On completion of this unit, learners will understand the theory and practice of marketing and promotion and be able to carry those skills to the rest of their learning.

They will know about audience development, including methods of market research and ways of targeting specific audiences. They will be able to market specific products and events, planning marketing activities which take into account budgetary considerations and selling points. Learners will understand how to use different marketing tools and techniques, including web-based technology.

Learning outcomes

On successful completion of this unit a learner will:

1 Understand the principles and theories of marketing and promotion

2 Understand techniques of audience development

3 Be able to develop strategies to successfully market specific products or events

4 Be able to use a range of marketing tools and techniques effectively.

Unit content

1 **Understand the principles and theories of marketing and promotion**

Elements: product awareness; branding; differentiation and uniqueness; product identity

Theories of marketing: legislation; price setting; placement; timing; competition; creating demand; promoting customer loyalty

Promotional techniques: advertising; press liaison and releases; campaigns; multi-media approaches and marketing blends

2 **Understand techniques of audience development**

Growth strategy: market research; market segmentation methods; consumer characteristics; demographics and geographics; mass markets; niche markets; arts and genre

Targeting: specific audiences; matching means of promotion to audience; unique selling points

Audience development: audience questionnaires and surveys; outreach

3 **Be able to develop strategies to successfully market specific products or events**

Budgetary guidelines: working with budgets; planning; costing and pricing; means of distribution; profit margins

Specific selling points: unique selling points (USP); style; image; fashion; genre

Marketing activities: contingencies; exploitation of news angles; free marketing e.g. gig guides; forming partnerships; synchronisation of marketing techniques; local/regional approaches; compliance e.g. legislation, codes of practice

4 **Be able to use a range of marketing tools and techniques effectively**

Advertising: posters; flyers; press release and copywriting; design issues

Web-based technology: email distribution; broadcast; uploading; streaming technologies; file formats; search engine optimisation; links; digital rights management; social networking; e-commerce solutions; viral marketing; use of websites in marketing

Marketing plan: techniques e.g. product placement, positioning, direct marketing, relationship marketing, guerrilla marketing, comparing effectiveness, evaluating results

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Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand the principles and theories of marketing and promotion	1.1 explain the elements which define a creative arts product/event 1.2 evaluate the theories of marketing 1.3 evaluate promotional techniques associated with creative arts activities
LO2 Understand techniques of audience development	2.1 propose and justify methods used for market research 2.2 explain how specific audiences can be targeted 2.3 propose and justify techniques for audience development
LO3 Be able to develop strategies to successfully market specific products or events	3.1 follow budgetary guidelines when preparing promotional activities 3.2 use specific selling points of a creative product/event to develop a marketing strategy 3.3 plan appropriate marketing activities which are timely, of quality, and satisfy any legislation or codes of practice which may apply
LO4 Be able to use a range of marketing tools and techniques effectively.	4.1 produce an advertising campaign for a creative arts event 4.2 contribute to the use of web-based technology in creative arts marketing 4.3 produce a marketing plan for a creative arts product/event.

Guidance

Links

This unit links with:

- *Unit 11: Composition in Context*
- *Unit 20: Improvisation in Music*
- *Unit 25: Managing a Creative Business*
- *Unit 27: The Music Business in the 21st Century*
- *Unit 42: Preparation, Process and Production in the Creative Arts*
- *Unit 47: Singing Techniques and Styles.*

This unit also has links with the following National Occupational Standards:

Community Arts

- CA2 Provide direction and leadership for your team
- CA7 Assist in pitching for community arts work
- CA8 Obtain and use research information
- CA9 Keep up to date with developments within the arts
- CA12 Understand how your community arts organisation can meet market needs and satisfy customer's needs
- CA16 Embracing diversity in your service provision.

Essential requirements

Learners will require access to resources on the theory and practice of marketing.

Employer engagement and vocational contexts

This unit gives the opportunity for contact with a range of arts organisations, venue managers and music business representatives regarding their marketing strategies and techniques, allowing learners to make suitable case studies during the assessment stages.

These links could be through, for example, visits to venues, visiting speakers and shadowing placements.

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Unit 27: The Music Business in the 21st Century

Unit code: M/601/1332

Level: 5

Credit value: 15

Unit aim

This unit aims to explore the ways in which music businesses operate in the ever-changing context of the 21st century.

Unit abstract

The music business is one of the most profitable in the entertainment sector and is worth billions of pounds in the UK alone. It has a complex structure encompassing many roles, creative and otherwise. Rapid developments in music technology, coupled with the internet revolution, have had a marked effect on the industry in the 21st century, leading to a period of constant change and evolution.

The unit deals with the principles of copyright and royalties, current distribution mechanisms and different forms of copyright infringement, in particular the implications of cyberspace. It considers the structures and workings of the music business, reviewing and analysing some of the key organisations, roles and professional bodies involved. Business and management skills are examined and there is an exploration of ways in which opportunities can be identified. The unit examines the effects that developments such as globalisation and digitisation have had on the music business and explores ways in which the industry has responded to change. It leads to a working knowledge of the business and management of portfolio careers, exploring the financial, legal and organisational aspects of self-employment in the music business.

On completion of this unit, learners should demonstrate an understanding of the nature of the changing music business and its workings, from self-employment to multi-national companies. They will know how copyright and royalties work and will be able to manage a portfolio career.

Learning outcomes

On successful completion of this unit a learner will:

1 Understand the roles and responsibilities of music business organisations

2 Understand the principles of copyright and royalties

3 Understand how music businesses work

4 Understand the management of a portfolio career.

Unit content

1 **Understand the roles and responsibilities of music business organisations**

Roles: creative e.g. songwriters, artists; recording e.g. producer, engineer; manufacture; distribution; management; PR; legal; publishing e.g. A&R; live performance e.g. merchandiser, tour manager

Responsibilities: management; promotion; copyright; logistics; administration; legal; health and safety

Organisations: record companies e.g. the Big Four, independent labels; publishers; recording studios; events management; professional bodies e.g. UK Music, British Phonograph Industry (BPI), Music Publishers Association (MPA), Association of Professional Recording Services (APRS)

2 **Understand the principles of copyright and royalties**

Intellectual property: copyright law e.g. Copyright, Designs and Patents Act (UK); licensing; royalties; permissions and clearances e.g. performing, publishing, broadcasting, recording

Distribution: collection societies e.g. Performing Rights Society for Music (PRS), Mechanical-Copyright Protection Society (MCPS), Phonographic Performance Ltd (PPL)

Copyright infringement: restricted acts e.g. copying, performing, arranging; piracy e.g. illegal downloading, copying

Contracts: management contracts; merchandising deals; recording contracts e.g. record deals, fund deals

3 **Understand how music businesses work**

Opportunities: employment opportunities; market research and analysis; gaps in the market; unique selling point

Skills: networking and communicating; working with others; inter-personal skills; financial skills; risk assessment

Management: leadership and delegation; contracting and sub-contracting; deadlines; commission; motivation; teamwork

Change: the effects of change e.g. globalisation, internet, digitisation, music technology

4 **Understand the management of a portfolio career**

Business: legal and financial e.g. tax, national insurance, VAT; pension; banking; business plan; fees e.g. setting, invoicing, accounting; financial viability and market research; effective filing e.g. receipts

Self-management: planning e.g. creating schedules, working to deadlines; communication skills e.g. networking; marketing e.g. creating websites, business cards; job searches e.g. websites, employment agencies

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Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand the roles and responsibilities of music business organisations	1.1 explain the activities of different roles in the music business 1.2 analyse the responsibilities of those involved in the music industry 1.3 compare the roles of different types of music organisations and key professional bodies
LO2 Understand the principles of copyright and royalties	2.1 examine intellectual property and copyright law 2.2 explain current distribution mechanisms 2.3 discuss copyright infringements 2.4 compare different types of contracts
LO3 Understand how music businesses work	3.1 evaluate business opportunities in the music industry 3.2 explain the necessary skills needed to make effective business judgements 3.3 explain management skills and abilities useful in the music business 3.4 evaluate ways in which the music business has responded to change
LO4 Understand the management of a portfolio career.	4.1 analyse the legal and financial structures required for a portfolio career 4.2 assess the importance of planning and organisation in a portfolio career.

Guidance

Links

This unit links with:

- *Unit 11: Composition in Context*
- *Unit 26: Marketing the Creative Arts*
- *Unit 42: Preparation, Process and Production in the Creative Arts*
- *Unit 47: Singing Techniques and Styles.*

This unit also has links with the following National Occupational Standards:

Community Arts

- CA2 Provide direction and leadership for your team
- CA7 Assist in pitching for community arts work
- CA8 Obtain and use research information
- CA9 Keep up to date with developments within the arts
- CA12 Understand how your community arts organisation can meet market needs and satisfy customer's needs
- CA16 Embracing diversity in your service provision

Technical Theatre

- CPD1 Improving your skills
- CPD2b Ensure that you and your team keep up to date with the technical and production areas of the live arts
- TP14.1a Getting in, fitting up and getting out (M4)
- TP5.6 Sourcing sound equipment
- MTP2 Cleaning up own work area

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Live Events and Promotion

- LE1 Support publicity activities for live events
- LE6 Support the planning of live events
- LE7 Identify suppliers of materials and equipment for the running of a live event
- LE10 Contribute to the production and distribution of publicity material for a live event
- LE11 Research and assess the appropriateness of different types of venues for different types of live events
- LE12 Assist with the implementation of safety and security at a live event
- LE13 Assist in the production of press releases and evaluate their effectiveness
- LE14 Contribute to the production and proof reading of copy for the advertising of a live event
- LE16 Manage changes to a live event schedule
- LE17 Identify and gain alternative forms of publicity for a live event
- LE18 Collate and present live event ticket sales information
- LE21 Assist in the preparation and maintenance of budgets for a live event

Music Business (Record Labels)

- RCS 2 Track royalties and produce invoices within a music business context
- RCS13 Understanding collecting societies and keeping up to date with the music industry
- MB07 Identify and propose new revenue streams and opportunities for music business
- MB10 Understanding the music industry and keeping up to date
- MB13 Understand how artist agreements and contracts work
- MB17 Contribute to assessing the impact of emerging technology for the music business
- MP28 Understand copyright and how copyright can be used to generate income in a music business environment.

Essential requirements

In addition to materials generally available, learners must have access to business support services such as Business Link and chambers of commerce. Resources may vary depending on the nature of the projects undertaken. These could include transport, outdoor venues, sound reproduction equipment, visual aids and art materials.

Employer engagement and vocational contexts

There are opportunities within this unit to make links with local music businesses such as recording studios, live music venues, broadcasters and music publishers. These links could be through, for example, visits to venues, visiting speakers and shadowing placements.

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Unit 28: Music Composition Techniques

Unit code: A/601/1561

Level: 4

Credit value: 15

Unit aim

The aim of this unit is to enable learners to use different composition techniques to produce coherent musical compositions.

Unit abstract

It may be tempting for student composers to stick to the styles (or even style) that they know and love best, but this can become restrictive in the development of their technical and creative ability. In order to pursue a career as a composer, learners will need a working knowledge of different composition techniques and the ability to compose in different styles. Composers may ultimately write in any style they like, but they should learn by exploring different techniques, stage by stage.

This unit helps learners to develop an awareness of what musical material is, in terms of melody, rhythm, harmony and structure, and how to manipulate it effectively to produce compositions. The unit introduces a range of starting points to help in creating musical ideas. It covers a variety of styles and techniques, aiming to broaden the range of influences that learners are exposed to. Learners engage with a variety of compositional techniques and styles through analyses, creative exercises and projects.

On completion of this unit learners will be able to compose from different starting points. They will have developed a working knowledge of different styles and techniques. They will be able to conceive musical ideas and manipulate them in an inventive way, developing the materials into coherent musical structures.

Learning outcomes

On successful completion of this unit a learner will:

1 Be able to create and manipulate melodic ideas

2 Be able to create and manipulate rhythmic ideas

3 Be able to create and manipulate harmonic ideas

4 Be able to use structural devices in compositions.

Unit content

1 **Be able to create and manipulate melodic ideas**

Create: starting points e.g. literary or visual stimulus, samples, word setting; melodic construction; phrases; sequences; motifs; repetition and contrast; tension and relaxation of tension; scales, modes and pitch sets

Manipulate: motivic development; extension and imitation; decoration and articulation; augmentation and diminution; melodic inversion; transposition; counter-melody; minimalist processes e.g. phasing, canon; analyse melodies through scores and listening across a range of styles and genres

2 **Be able to create and manipulate rhythmic ideas**

Create: starting points e.g. found sounds, chance methods, samples; repetition and contrast; tension and relaxation of tension; rhythmic patterns e.g. riffs, ostinati

Manipulate: motivic development; use of counterpoint; augmentation and diminution; additive and reductive rhythms; syncopation; minimalist processes; analyse rhythmic devices through scores and listening across a range of styles and genres

3 **Be able to create and manipulate harmonic ideas**

Create: starting points e.g. improvisation, chord constructions; harmonic constructions e.g. triadic harmony, quartal harmony, clusters, harmonic systems

Manipulate: modulation; harmonic direction; added note chords; blue notes; figuration and voicing; tonality and atonality; serial harmony; chord progressions; chromaticism; drones and pedals; inversions; analyse the use of harmony through scores and listening across a range of styles and genres

4 **Be able to use structural devices in compositions**

Forms: common vocal and instrumental forms e.g. ternary, rondo form, arch form, variations; song structures e.g. strophic, 12-bar blues, verse and chorus, dance music collages

Structural devices: repetition and contrast; tension and relaxation of tension; minimalist processes; fugal devices; middle eight; introductions and codas; golden section; palindromes; cut and paste; analyse musical structures through scores and listening across a range of styles and genres

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Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Be able to create and manipulate melodic ideas	1.1 create melodic ideas from different stimuli 1.2 manipulate and develop melodic ideas using different compositional techniques
LO2 Be able to create and manipulate rhythmic ideas	2.1 create rhythmic ideas from different stimuli 2.2 manipulate and develop rhythmic ideas using different compositional techniques
LO3 Be able to create and manipulate harmonic ideas	3.1 create harmonic ideas from different stimuli 3.2 manipulate and develop harmonic ideas using different compositional techniques
LO4 Be able to use structural devices in compositions.	4.1 create music using different forms 4.2 create music using different structural devices.

Guidance

Links

This unit links with:

- *Unit 7: Aural Perception*
- *Unit 10: Composing for Film and Television*
- *Unit 11: Composition in Context*
- *Unit 18: Harmony and Arranging*
- *Unit 19: Harmony and Composition*
- *Unit 20: Improvisation in Music*
- *Unit 31: Music Notation*
- *Unit 48: Songwriting Techniques and Skills*
- *Unit 54: World Music Composition and Performance.*

This unit also has links with the following National Occupational Standards:

Music Business (Record Labels)

- IM28 Create music for interactive media products.

Essential requirements

A wide range of recordings of different music, including western classical music, contemporary art music, popular music, jazz music and music from around the world is needed. Access to a range of scores is also required. Learners will benefit from access to keyboards to be used as tools to underpin theoretical concepts. Opportunities must be provided for the performance of learners' compositions.

Employer engagement and vocational contexts

This unit gives learners the opportunity to forge links with local music organisations. These links could be formed through composition workshops from visiting artists and attendance at live performances.

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Unit 29: Music Electronics and Maintenance

Unit code: D/601/1567

Level: 5

Credit value: 15

Unit aim

The aim of this unit is to enable learners to demonstrate a proactive and constructive approach to equipment maintenance in the studio environment and to consolidate their skills in electronics.

Unit abstract

Although music technology equipment is usually robust and resilient, it does require maintenance, patience, understanding and occasional repair. Musicians working in the studio environment will expect their equipment to be functioning, reliable and calibrated and will not anticipate the technology getting in the way of making the best music possible.

This unit investigates the maintenance and design of music-related electronic equipment, from vacuum tube devices through to the most recent developing technologies. It introduces the basic principles of design used in a wide range of music hardware and provides learners with practical experience of design and construction.

Learners will be expected to handle expensive and sometimes delicate equipment throughout their careers and this unit will give them a deep understanding of the manufacture, maintenance and handling required. Learners will also be expected to appreciate how to install equipment, a career that they may progress to in its own right, and therefore have an understanding of the electronic specifications and methodologies which are found in modern music equipment.

Although not a full course in electronics, this unit will instil learners with the confidence to carry out repairs and maintenance and to understand when to employ a fully-qualified repair service.

Learning outcomes

On successful completion of this unit a learner will:

1 Understand how to maintain studio equipment

2 Understand electronic circuits used in music technology

3 Understand digital control circuits used in music technology

4 Be able to repair music production equipment.

Unit content

1 **Understand how to maintain studio equipment**

Scheduled: regular maintenance; continuity checking; alignment, balance and calibration; cleaning; testing for client requirements

Ad hoc: accessibility; external suppliers; following faults and emergencies

Procedures: measurement; recording (of maintenance data); reporting; management; installation

2 **Understand electronic circuits used in music technology**

Sound sources: signal generators e.g. white noise generators, oscillators, voltage controlled oscillators

Modifiers: amplitude modifiers e.g. voltage controlled amplifiers, gates, compressors, limiters, expanders, envelope shapers; signal modifiers e.g. effects based on filters, effects based on generated distortion, effects based on modulated and unmodulated delays

Digital: signals e.g. analogue/digital conversion, wave table sources, digital signal processing; memory e.g. systems built around digital memory delay, reverberation, reverse echo, pitch shift, phase effects

Circuit design: circuit design; block diagrams; modifying and adapting standard circuits to requirements

Fabrication: prototyping; breadboarding; professional services e.g. effective fabrication techniques, pick and place

3 **Understand digital control circuits used in music technology**

Basic control: control surfaces; digital patch bays; digital switches; parameter control; routing control

MIDI systems: MIDI control e.g. MIDI philosophy and protocols; opto-isolators; practical MIDI circuits

4 **Be able to repair music production equipment**

Fault finding: checking equipment and fault finding; practical application of signal tracing; common faults and their resolution; equipment failure; systems failure; rebooting; factory reset procedures; testing internal batteries

Repair: circuit board repairs; circuit board replacement; component testing; component replacement; warranty issues; when to use professional repair services

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Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand how to maintain studio equipment	1.1 justify a maintenance schedule for a typical production facility 1.2 explain routine maintenance procedures for music production equipment 1.3 explain ways to resolve issues in complex situations and emergencies
LO2 Understand electronic circuits used in music technology	2.1 explain electronic circuits used in music technology 2.2 analyse the functions of electronic circuits 2.3 identify the function of areas of circuitry on given PCBs 2.4 explain how electronic equipment is fabricated
LO3 Understand digital control circuits used in music technology	3.1 explain circuits used for digital control of switches and parameters 3.2 explain the principles of MIDI parameter control and processing 3.3 identify opportunities for the use of digital control
LO4 Be able to repair music production equipment.	4.1 assess faults using test equipment 4.2 rectify component failure faults 4.3 rectify circuit board replacement faults.

Guidance

Links

This unit provides underpinning knowledge for the technical music production units.

It links with:

- *Unit 4: Audio Electronics*
- *Unit 49: Sound Creation and Manipulation*
- *Unit 52: Studio Recording and Engineering.*

This unit also has links with the following National Occupational Standards:

Technical Theatre

- CPD1 Improving your skills
- CPD2b Ensure that you and your team keep up to date with the technical and production areas of the live arts
- HS1 Working safely
- TP2.4a Contribute to developing and refining ideas for sound (C1)
- TP2.4b Developing and refining ideas for sound (C1).

Essential requirements

Basic workshop facilities will be required for this unit. They must include soldering facilities and either extraction systems or excellent ventilation. Learners are required to manufacture printed circuit boards, but the majority of the unit can be delivered using prototyping equipment such as breadboards and veroboard. Specialist equipment is best used for this, though it can be done in small quantities without such equipment. Learners will need to use a multimeter and oscilloscope. Signal generators (including white noise generator) and bench power supplies would be useful for circuit testing.

Computer circuit simulation software will be useful for the analysis and discussion of circuits.

Employer engagement and vocational contexts

Learners should be encouraged to find out about the audio facilities in their local area and visit them if possible. Observation or work experiences would benefit them. The opportunity to speak to electronics or maintenance personnel, either in the workshop or within your own learning facilities, should be taken.

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Unit 30: Music in Context

Unit code: L/601/1323

Level: 4

Credit value: 15

Unit aim

The aim of this unit is to enable learners to examine the contexts within which high and popular musical culture has evolved and continues to develop.

Unit abstract

The study of any chosen art form requires placing it in context with other art forms. Any style or feature, regardless of discipline, will have been influenced by previous events. These experiences could be from any source: other art forms, previous personalities, cultural influences as well as social and political trends and demands, religious beliefs and so on. Global influences are hugely important and quickly felt with the ever accelerating capabilities of technology. Any single creation will, in effect, have a creative family tree, an inheritance trail which can be traced back through the creator's experiences and through previous works and how these in turn were influenced. Disciplines migrate to other forms (for example architecture to art to literature to music). Some events are directly linked (for example how war directly results in works of art, literature, photography, music and film). Other influences have a longer process of evolution (for example the social and cultural origins of pop music to the present-day milieu of genres). Often a completely different development will open new avenues (for example improvements in mechanical recording and reproduction of music and the effect on songwriting). All continue to develop.

Learners will be able to research these pathways and understand how the chosen art form resulted in the way it did, and when it did. Study should be as wide and detailed as required to formulate an informed conclusion.

On completion of this unit learners will have much greater knowledge and appreciation of how art forms emerge and develop. An awareness of possible future directions which could influence the way music is produced and marketed will also be cultivated.

Learning outcomes

On successful completion of this unit a learner will:

1 Understand the key developments in different genres of music

2 Understand a variety of musical genres

3 Understand the cultural contexts that musicians work within

4 Understand the effects of globalisation on music within a wider cross-cultural context.

Unit content

1 **Understand the key developments in different genres of music**

Evolution: key periods and artistic movements in popular music and western classical traditions where appropriate; relationships made between modern practices and past practices

Influences: cultural and social; political and historical; spiritual; geographical; technological; issues of gender and sexuality; key works; cross-cultural; religious

Practitioners: a range of influential practitioners who have helped to shape the direction of music e.g. Bach, Mozart, Beethoven, Wagner, Schoenberg, Boulez, Caruso, Berlin, Gershwin, Sinatra, Presley, Beatles, Spector

2 **Understand a variety of musical genres**

Styles of performance: different styles of performance characteristics belonging to historical periods and artistic movements e.g. punk, baroque, jazz

Location: the effect that location has on styles of performance and reception; open spaces; studio; site-specific e.g. carnival, rock festivals

Audience: the relationship between audience and the work created e.g. mods, rockers, demographics of radio audiences, punk, sub-genres, country, bluegrass, indie and brit pop, jazz and cool

3 **Understand the cultural contexts that musicians work within**

Cultural: the conditions under which a musician creates a work of art and how these can affect the completed product e.g. censorship, early rock and roll, punk, resistance to new ideas (*Rite of Spring*)

Social: the social structures and institutions which musicians operate within; moral and ethical concerns; environmental issues

Political: censorship; free expression; manipulation; propaganda

4 **Understand the effects of globalisation on music within a wider cross-cultural context**

Technology: ever-developing technological influences on the production of music; combining music with other art forms; technology within any given period e.g. recording, playback developments, formats

Multi-national: monopolisation of the administration of music by large business concerns (the Big Four); sustainability; copyright law

Markets: cross-cultural influences on music; fusions; global opportunities in the marketing of new music; advantages and disadvantages of global availability

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Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand the key developments in different genres of music	1.1 examine extracts from selected works from a contextual perspective 1.2 explain the influences that have been brought to bear on the selected works 1.3 compare a range of practitioners
LO2 Understand a variety of musical genres	2.1 analyse the characteristics of different musical genres 2.2 assess the effect location has on the production and reception of a piece of work 2.3 analyse the relationship between the audience and the music
LO3 Understand the cultural contexts that musicians work within	3.1 explain the cultural demands placed on musicians 3.2 analyse how the social environment can influence the production of music 3.3 review how political legislation can influence the production of music
LO4 Understand the effects of globalisation on music within a wider cross-cultural context.	4.1 evaluate the use and development of technology 4.2 apply appropriate arguments to current business directions 4.3 examine the opportunities offered in a global market looking at both advantages and disadvantages.

Guidance

Links

This unit links with:

- *Unit 11: Composition in Context*
- *Unit 15: Creative Arts Research Skills*
- *Unit 25: Managing A Creative Business*
- *Unit 26: Marketing the Creative Arts*
- *Unit 27: Music Business in the 21st Century*
- *Unit 28: Music Composition Techniques*
- *Unit 32: Music Performance Skills*
- *Unit 33: Music Performance Studies*
- *Unit 42: Preparation, Process and Production in the Creative Arts*
- *Unit 46: Research Project*
- *Unit 47: Singing Techniques and Styles.*

This unit also has links with the following National Occupational Standards:

Community Arts

- CA2 Provide direction and leadership for your team
- CA7 Assist in pitching for community arts work
- CA8 Obtain and use research information
- CA9 Keep up to date with developments within the arts
- CA12 Understand how your community arts organisation can meet market needs and satisfy customer's needs
- CA16 Embracing diversity in your service provision

Music Business (Record Labels)

- RCS 2 Track royalties and produce invoices within a music business context
- RCS13 Understanding collecting societies and keeping up to date with the music industry
- MB07 Identify and propose new revenue streams and opportunities for music business
- MB10 Understanding the music industry and keeping up to date
- MB13 Understand how artist agreements and contracts work
- MB17 Contribute to assessing the impact of emerging technology for the music business
- MP28 Understand copyright and how copyright can be used to generate income in a music business environment.

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Essential requirements

A number of areas in this unit require access to subject matter covering a range of art forms. Information on the social and cultural implications covered is also required. Knowledge of referencing is required e.g. the Harvard system.

Employer engagement and vocational contexts

Links with music publishers, art societies, museums and journalistic concerns could all play a part in the research undertaken in this unit. For an in-depth study, performance contexts could involve links to venues.

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Unit 31: Music Notation

Unit code: J/601/1661

Level: 4

Credit value: 15

Unit aim

This unit aims to enable learners to use music notation with a depth of understanding of the principles behind it.

Unit abstract

This unit is written with non-readers of music in mind. Although it is possible to have a successful career in music performance without learning how to use music notation, there is no doubt that the ability to read music is a useful tool. Bill Bruford, one of the greatest drummers of all time, when asked recently what he would change about his career answered that he would have learned to sight read better which would have given him access to more work.

The unit is underpinned by theoretical knowledge that can be applied to practical situations. An understanding of music notation helps in all aspects of musical activity – listening, performing, composing and arranging. An ability to read music not only facilitates sight reading but also helps to develop critical listening skills and a deeper understanding and appreciation of the music-making process. Notation is a useful design tool in the composition process, particularly in the use of computer software packages such as Sibelius. The producer/sound engineer who can read music will communicate on an equal footing with musicians.

Working with a wide range of musical styles, the unit develops an awareness and understanding of different methods of notation, including conventional staff, drum, graphic and tablature notation. It includes both theoretical and practical work and develops skills in the interpretation and use of notation and the ability to use appropriate musical vocabulary.

On completion of this unit, learners will be able to follow different types of scores using various systems of music notation. They will be able to read and write music using conventional staff notation. They will learn how chords work and understand the different ways in which they are transcribed.

Learning outcomes

On successful completion of this unit a learner will:

1 Be able to read scores using various systems of notation

2 Be able to read and write rhythms

3 Be able to read and write pitches

4 Understand how to interpret chord signs and symbols.

Unit content

1 **Be able to read scores using various systems of notation**

Conventional notation: five-line stave; treble and bass clefs; orchestral score; transposing instruments; sight reading

Graphic notation: symbols and timelines e.g. Cornelius Cardew *Treatise*, Cathy Berberian *Stripsody*, Luciano Berio *Sequenzas*

Drum notation and tablature: grids; drum patterns; guitar chords

Technology: track sheets; event displays; voice data charts

2 **Be able to read and write rhythms**

Note values: note durations e.g. rests, ties and dots; triplets; tempo e.g. metronome markings and bpm; Italian terms

Time signatures: types e.g. duple, triple and quadruple, simple and compound time

Rhythmic patterns: pulse; metre; backbeat; note groupings; riffs and ostinati; syncopation e.g. polyrhythms, cross rhythms and rhythmic counterpoint

3 **Be able to read and write pitches**

Scales and modes: pitch names; degrees of the scale; scales e.g. major, minor, pentatonic, modes, chromatic, blues, whole tone; modulation

Key signatures: major and minor; sharps and flats

Intervals: simple and compound; concords and discords; transposition

4 **Understand how to interpret chord signs and symbols**

Symbols: Roman numerals; cue sheets and chord charts; figured bass

Triads: triad construction; positions and inversions

Cadences: common chord progressions; ends of phrases; perfect, imperfect, plagal and interrupted cadences

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Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Be able to read scores using various systems of notation	1.1 follow a score using conventional staff notation 1.2 create and perform music written in graphic notation 1.3 follow drum notation and tablature 1.4 follow technology-based notation systems
LO2 Be able to read and write rhythms	2.1 write and perform note values accurately 2.2 follow time signatures in performance and transcription 2.3 write and perform rhythmic patterns accurately
LO3 Be able to read and write pitches	3.1 use different scales and modes 3.2 use key signatures accurately 3.3 write and perform simple and compound intervals
LO4 Understand how to interpret chord signs and symbols.	4.1 explain the use of different chord symbols 4.2 analyse different triadic chords 4.3 analyse the use of different cadences.

Guidance

Links

This unit links with:

- *Unit 7: Aural Perception*
- *Unit 8: Band Rehearsal and Performance*
- *Unit 10: Composing for Film and Television*
- *Unit 11: Composition in Context*
- *Unit 18: Harmony and Arranging*
- *Unit 19: Harmony and Composition*
- *Unit 21: Keyboard Skills*
- *Unit 28: Music Composition Techniques*
- *Unit 32: Music Performance Skills*
- *Unit 33: Music Performance Studies*
- *Unit 39: Orchestration*
- *Unit 47: Singing Techniques and Styles*
- *Unit 48: Songwriting Techniques and Skills.*

Essential requirements

In addition to material generally available, learners must have access to practice rooms and a music studio with a piano or keyboard, facilities to play recorded music, a collection of scores, some simple percussion instruments and a whiteboard with manuscript. There must be access to a wide selection of recordings which should include examples of western art music, contemporary art music, popular music and jazz, world music, and music from film and television. This unit provides many opportunities for music technology and software to be incorporated.

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Unit 32: Music Performance Skills

Unit code: M/601/1315

Level: 5

Credit value: 15

Unit aim

This unit aims to enable learners to develop their performance skills effectively in a professional musical environment.

Unit abstract

The skills of a performer are developed through practice and the experience of performing. It involves the preparation and presentation of a varied repertoire in group and solo performance. It encompasses techniques of memory, communication, control of tension, improvisation and critical listening, building on growing instrumental or vocal ability. When coupled with the analysis of effective practice, improving performances will develop. Exploring and discovering a varied repertoire is an important element of performers acquiring good musicianship and overall performance skills. Self-evaluation and criticism during rehearsal, practice and performance will build up expertise.

Performers will need to express their ideas and interpretations to others in their group. Being able to take direction during rehearsal with attention to detail is an important skill for all musicians to develop.

On completing this unit learners will have improved their rehearsal and practice disciplines within the music performance arena.

Learning outcomes

On successful completion of this unit a learner will:

1 Be able to perform solo instrumental or vocal skills

2 Be able to develop group performance skills

3 Be able to perform instrumental or vocal skills in a varied repertoire

4 Be able to develop effective and relevant rehearsal techniques.

Unit content

1 **Be able to perform solo instrumental or vocal skills**

Technique and control: musical skills e.g. aural memory, practice and preparation, fluency, concentration, focus, stage presence, overall instrument control

Accuracy: technique e.g. articulation, rhythm, pitch, intonation, dynamics, phrasing, timing, regular practice leading to improvement

Improvisation: technique e.g. empathy, listening and responding, different stimuli, awareness of underlying harmonic and rhythmic structure, form and direction

2 **Be able to develop group performance skills**

Communication: non-verbal e.g. with other players and audience, musical communication, verbal and non-verbal communication, group dynamic and organisation

Control: technique e.g. posture and eye contact, concentration, focus, groove, tempo and timekeeping

Critical listening: musical skills e.g. tuning, intonation, sound awareness of own performance

3 **Be able to perform instrumental or vocal skills in a varied repertoire**

Variety: pieces e.g. range of styles and forms, both group and solo, from appropriate genres

Stylistic: conventions e.g. genre specific, interpretation, dynamics and tempo, appropriate sound and timbre

Solo and group: technique e.g. appropriate programme material in a range of styles, representative selection of pieces including technical studies, demonstrating appropriate level of difficulty

4 **Be able to develop effective and relevant rehearsal techniques**

Musical: outcome e.g. leading rehearsal and decision making, working effectively with other members of the group, identifying and eradicating mistakes constructively and effectively, musical detail, controlling the performance, collective accomplishment

Musical material: ideas e.g. production decisions, variety of interpretive ideas, accuracy in detail, critical musical decisions dependent on group capabilities, devising new sounds, timbres, harmonies, chord sequences, solos

Arranging: technique e.g. cover arrangements, creative arrangement ideas, recreation of sound and feel, producing musical material

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Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Be able to perform solo instrumental or vocal skills	1.1 exhibit considered and controlled instrumental or vocal technique 1.2 display musical accuracy in performance 1.3 show considered and controlled musical skills in improvisation
LO2 Be able to develop group performance skills	2.1 display positive communication skills in group performance 2.2 exhibit confidence of control over performance in a group environment 2.3 demonstrate critical listening skills and evaluate group performance
LO3 Be able to perform instrumental or vocal skills in a varied repertoire	3.1 show considered and controlled approaches to performing a variety of pieces 3.2 produce stylistic conventions appropriate to chosen repertoire 3.3 create appropriate repertoire for group and solo performance
LO4 Be able to develop effective and relevant rehearsal techniques.	4.1 demonstrate the creative process of directing other musicians in an accomplished group performance 4.2 produce ideas to contribute to an accomplished group performance 4.3 create suitable rehearsal material for cover arrangements and creative arrangements.

Guidance

Links

This unit links with:

- *Unit 7: Aural Perception*
- *Unit 8: Band Rehearsal and Performance*
- *Unit 18: Harmony and Arranging*
- *Unit 20: Improvisation in Music*
- *Unit 31: Music Notation*
- *Unit 33: Music Performance Studies.*

Essential requirements

Learners must have regular opportunities for performance. Regular practice is essential and should be monitored. Frequent and varied listening is essential where learners are exposed to a wide range of music of different styles. They must be encouraged to attend a variety of live performances. Learners must demonstrate their knowledge and understanding in a variety of ways, through presentation, criticism, discussion with tutors, visiting musicians and peer group discussion. Technical terms must be used appropriately and accurately in discussion.

Learners must have access to practice rooms with keyboards or pianos and listening facilities. Learners must also have access to microphones and recording equipment when necessary. A large room will be needed for group performance and rehearsal.

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Unit 33: Music Performance Studies

Unit code: A/601/1317

Level: 4

Credit value: 15

Unit aim

This unit aims to enable learners to practise and monitor their progress in order to develop as an instrumental or vocal performer.

Unit abstract

Understanding how to structure and monitor practice will enable meaningful progress.

Intrinsic to music is musical performance. Through practice all successful musicians develop a variety of performance skills, both as an individual performer and when working with other musicians. This applies equally to working in traditional environments and the electronic domain (for example, studio, DJ etc). In addition, all musicians benefit from expanding their knowledge and understanding of contrasting styles and different instruments.

To improve as a player and performer, practice of technique and accurate playing of a range of music and styles is essential. This unit involves a study of varied repertoire, reading and sight-reading techniques and structured practice and preparation skills. It also includes rehearsal, direction and performance for solo and ensemble work. Regardless of style, genre or period, improvement as a player involves not only practice but evaluation of how effective this process is.

On completion of this unit learners will understand the underlying process – and ingredients – of successful and sustained improvement in performance.

Learning outcomes

On successful completion of this unit a learner will:

1 Be able to practise a varied repertoire of music in order to improve instrumental (or vocal) skills in solo performances

2 Be able to practise a varied repertoire of ensemble music with others in order to improve instrumental or vocal skills as a group performer

3 Understand rehearsal techniques

4 Be able to read music notations in practice and performance.

Unit content

1 **Be able to practise a varied repertoire of music in order to improve instrumental or vocal skills in solo performances**

Solo performance: technique e.g. control of instrument or voice, intonation, timbre, phrasing, projection, timekeeping, dynamics, feel, improvisation

Repertoire: style e.g. traditional and modern stylistic conventions, selecting instrument-specific repertoire or voice-specific, context, directed listening and study

Technique: instrumental skill e.g. dexterity, fingering, bowing, embouchure, breathing, transposition, improvisation

2 **Be able to practise a varied repertoire of ensemble music with others in order to improve instrumental or vocal skills as a group performer**

Ensemble performance: technique e.g. timing, intonation, timbre, feel, idiomatic interpretation, improvisation, balance within the group

Communication: non-verbal e.g. ear and eye contact, groove, dynamic level, audience awareness, stage presence

Repertoire: ensemble skill e.g. traditional and modern stylistic conventions, selecting a balanced and suitable programme, context, directed listening and study

3 **Understand rehearsal techniques**

Practice: technique e.g. effective methodology, self-learning skills, effective use of time, self-evaluation

Rehearsal: methodology e.g. effective use of time, organisation and preparation, identification of artistic and aesthetic musical considerations, giving and taking musical direction, self-evaluation

Professionalism: rehearsal skills e.g. timekeeping, group dynamic, standards, instrument or voice care, consideration

4 **Be able to read music notations in practice and performance**

Traditional notation: manuscript e.g. effective self-learning, reading traditional notation appropriate to instrument or voice, sight reading, notated transcription

Alternate notation: manuscript e.g. effective self-learning, rhythmic notation, tablature, lead sheet, chord chart, building a part, instrument- or voice-specific notation, learning 'by ear'

Stylistic conventions: idiomatic conventions e.g. melodic conventions, chordal conventions, rhythmic conventions, scales, modes, feel, groove

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Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Be able to practise a varied repertoire of music in order to improve instrumental or vocal skills in solo performances	1.1 demonstrate appropriate skills in solo performances 1.2 perform a suitably varied solo repertoire 1.3 evidence developing instrumental or vocal technique
LO2 Be able to practise a varied repertoire of ensemble music with others in order to improve instrumental or vocal skills as a group performer	2.1 demonstrate appropriate skills in ensemble performances 2.2 communicate effectively during ensemble performances 2.3 select, rehearse and perform suitable ensemble repertoire
LO3 Understand rehearsal techniques	3.1 assess an effective practice regime 3.2 analyse effective ensemble rehearsal techniques 3.3 evaluate an appropriate professional attitude
LO4 Be able to read music notations in practice and performance.	4.1 demonstrate the ability to read notation in a performance 4.2 demonstrate the ability to read alternative notation in performance 4.3 perform stylistic conventions when reading music.

Guidance

Links

This unit links with:

- *Unit 7: Aural Perception*
- *Unit 8: Band Rehearsal and Performance*
- *Unit 18: Harmony and Arranging*
- *Unit 20: Improvisation in Music*
- *Unit 31: Music Notation*
- *Unit 32: Music Performance Skills.*

Essential requirements

Learners must have access to practice rooms with keyboards or pianos, and listening facilities. Learners must also have access to microphones and recording equipment when necessary. A large room will be needed for group performance and rehearsal.

Learners will need access to a variety of rehearsal and performance areas. These must include specialist performance and rehearsal spaces appropriate to learners' musical direction.

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Unit 34: Music Production Analysis

Unit code: J/601/1711

Level: 4

Credit value: 15

Unit aim

This unit aims to enable learners to analyse and recreate the production techniques used by others in the creation of landmark recordings.

Unit abstract

Analytical listening skills are fundamental to the role of a music producer. This unit develops aural skills that focus on studio-recorded performance and music production, working with a wide range of musical styles and production methods. Learners will develop the skills to analyse the musical and production elements of recorded works, identifying studio processes that can be developed in their own work. They will learn how to identify the musical characteristics of a range of genres, recognise the different stylistic elements and evaluate the production techniques involved in the recording process.

Learners will analyse how elements of good practice can be applied to creative recordings, developing production skills through analytical listening. Learners will also experience the creative processes that have marked individuality in production and experience how the art of recording has advanced through experimentation, creativity and experience.

On completion of this unit students will be able to evaluate the musical and production elements of a range of landmark recordings. They will understand the musical and technological factors that define music and production styles, identify key studio techniques and be able to apply this to creative recording. They will demonstrate their understanding of studio processes and the application of analysis through practical recording.

Learning outcomes

On successful completion of this unit a learner will:

1 Understand the musical factors that define musical styles and genres

2 Understand the technological factors that define musical styles and genres

3 Understand studio production practices through listening and analysis

4 Be able to apply studio production techniques to creative recording.

Unit content

1 **Understand the musical factors that define musical styles and genres**

Texture and timbre: techniques e.g. instrumentation, amplification, ambient noise, balance, arrangement, dynamics, voicing, range, effects

Rhythm: approaches e.g. pulse, time signature, metre, groove, feel, syncopation

Style: context e.g. idiom, signifiers, performance techniques, motifs, riffs, instrumentation, arrangement, performance mistakes

2 **Understand the technological factors that define musical styles and genres**

Recording systems: resources e.g. mono, stereo, ambient recordings, tape recording, 4-track, multi-tracking, overdubbing, effects, digital systems, digital correction

Performance technology: solutions e.g. effects processing, synthesisers, drum machines, MIDI, virtual instruments, sampling, digital modelling, voice processors, analogue and digital formats

Computer technology: tools e.g. MIDI sequencing, digital audio workstations, plug-ins, virtual instruments, digital editing, mastering, networking, the internet, digital compression

3 **Understand studio production practices through listening and analysis**

Landmark recordings: personalities e.g. innovative producers and engineers, innovative artists and recordings

Studio technology: techniques e.g. magnetic tape, analogue effects, digital effects, mixing, synthesis, sampling, digital recording, digital mixing, digital correction

Studio techniques: skills e.g. microphone techniques, analogue editing, cutting and splicing, multi-track techniques, ambient recording, processors, editing, mixing, mastering

4 **Be able to apply studio production techniques to creative recording**

Analysis: examples e.g. microphone techniques, location, room acoustics, texture, sound treatment, sound editing techniques, sound sources, mixing techniques, mastering techniques

Application: considerations e.g. audio quality, musicality, arrangement, communication, sound and style, professional standards

Innovation: experimentation e.g. imitation of classic techniques, application of techniques to new circumstances, unusual use of equipment, effect programming, mixing technique

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Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand the musical factors that define musical styles and genres	1.1 evaluate the texture and timbre of recorded music through listening 1.2 analyse the rhythmic elements of recorded music through listening 1.3 categorise historical musical styles through recording and performance signifiers
LO2 Understand the technological factors that define musical styles and genres	2.1 identify the recording systems that capture music performance 2.2 identify performance technology through aural analysis 2.3 discuss how computer technologies have influenced musical styles and genres
LO3 Understand studio production practices through listening and analysis	3.1 analyse landmark recordings through listening 3.2 review the studio technology involved in landmark recordings 3.3 review the studio techniques involved in landmark recordings
LO4 Be able to apply studio production techniques to creative recording.	4.1 create recordings based on analysis of landmark productions 4.2 record music by applying techniques formulated through analysis 4.3 experiment creatively with studio techniques in music recording.

Guidance

Links

This unit links with

- *Unit 3: Applied Music Production Techniques*
- *Unit 7: Aural Perception*
- *Unit 12: Computer Music Composition and Production*
- *Unit 16: Critical Music Listening*
- *Unit 28: Music Composition Techniques*
- *Unit 35: Music Studio Production*
- *Unit 49: Sound Creation and Manipulation*
- *Unit 52: Studio Recording and Engineering.*

This unit also has links with the following National Occupational Standards:

Technical Theatre

- CPD1 Improving your skills
- CPD2b Ensure that you and your team keep up to date with the technical and production areas of the live arts
- CPD4a Contributing to technical production work for performance
- TP8.4 Setting up and checking sound equipment (C6)
- HS1 Working safely.

Essential requirements

Learners will require access to a wide range of recorded music and appropriate sound reproduction equipment for the individual study of this music. Access to examples of original formats and reproduction equipment would be beneficial, possibly through visits to appropriate sound archives. Extensive library resources, including books, CDs, digital and internet access, are critical to the successful delivery of the unit.

The demonstration of techniques will require access to a comprehensively equipped studio environment, including a variety of sound recording areas and a wide range of microphones and signal-processing equipment. Much of the experimental work is likely to require access to computer-based sound design, sound processing, multi-track and mastering software.

Employer engagement and vocational contexts

Learners requiring soundtracks could form a virtual client brief, which would also add a vocational context to the work.

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Unit 35: Music Studio Production

Unit code: D/601/1309

Level: 5

Credit value: 15

Unit aim

The unit's aim is to enable learners to produce recordings to professional standards by developing their practical and theoretical skills.

Unit abstract

To achieve professional standards in both recording and production, learners need a firm grasp of the theories underpinning.

In this unit learners will consolidate practical knowledge of studio equipment and processes with theoretical skills covering a number of aspects of audio recording and production. The unit is concerned with the application of the theoretical knowledge required to achieve professional standards of practice. An understanding of sound theory and digital audio concepts will allow learners to make informed decisions during the recording and production processes. These skills are transferable to a number of areas, such as live sound, audio post-production and sound design, and can lead to employment such as recording studio engineer, sound engineer for live venues, studio assistant, sound engineer for post-audio in the media industry and audio consultant.

Much of the delivery should be made to small groups of learners in the studio environment. Learners should be encouraged to experiment with and explore the concepts and techniques that are presented to them within the context of their creative resources.

The production process can be broken down into simpler blocks and then reassembled, as learners become familiar with these. Creative and technical aspects of the process should be integrated so that activities are always rewarding.

Thorough analysis of existing examples of excellence, both musical and technical, is to be encouraged and seminar work could be geared towards this.

Learning outcomes

On successful completion of this unit a learner will:

1 Be able to use the components of the modern recording studio

2 Understand sound theory and digital audio concepts

3 Be able to record instruments and voices within the technical and creative boundaries of the product

4 Be able to mix a recording to a professional technical and creative standard.

Unit content

1 **Be able to use the components of the modern recording studio**

Signal sources and destinations: acoustic sources; electronic sources e.g. digital audio workstation (DAW), hard disk recorder; stereo sources; monitor sources; tape returns

Routing and patching: channel/mix paths; busses; grouping; auxiliary busses; patchbays; normalling; latency; latency compensation

Foldback: headphones; amplifiers; foldback sends; foldback mixes; communication

2 **Understand sound theory and digital audio concepts**

Sound theory: room acoustics; phase; sound treatment; stereo; direct and indirect sound; reverberation; diffusion; absorption

Digital audio concepts: sampling rate; bit depth; word clock; AD/DA conversion; native and digital signal processing (DSP) processing; data compression algorithms e.g. lossy, lossless; MIDI standard

Gain staging: level standard; fader setting; gain settings; meters; unity; headroom; difference between analogue and digital domain e.g. clipping, headroom, dynamic range

3 **Be able to record instruments and voices within the technical and creative boundaries of the product**

Microphone choice: characteristics e.g. types, polar patterns, frequency response, instrumental characteristics, tonal quality, matched pairs

Microphone placement: stereo techniques e.g. M/S, spaced pair, coincidental, Decca tree; distance; on/off axis; ambience e.g. direct/indirect sound, spill, room sound; proximity effect, phase

Interfacing: preamplifiers; direct injection; line mixers; impedance matching; phase

4 **Be able to mix a recording to a professional technical and creative standard**

Editing techniques: editing tools; correction e.g. timing, pitch

Registral placement: the frequency spectrum; equalisation; separation; masking

Achieving depth and width: level; balance; dry/wet balance; early reflections; reverberation; ambience; panning; delay; mix planning

Dynamic processing: outboard e.g. expander, gates, limiter, compression; compression techniques e.g. serial, parallel, two-stage; side chain

Mastering: standards e.g. media, editing, enhancement, labelling, storage, archiving, mastering for different media; file compression e.g. lossless

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Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Be able to use the components of the modern recording studio	1.1 match signal sources and destinations within the recording studio environment 1.2 define appropriate gain staging 1.3 select correct routing and patching techniques within the modern recording studio
LO2 Understand sound theory and digital audio concepts	2.1 justify microphone placement relating to sound theory 2.2 evaluate correct gain staging in the modern studio
LO3 Be able to record instruments and voices within the technical and creative boundaries of the product	3.1 follow technical and artistic guidelines to inform appropriate microphone choice 3.2 follow technical and artistic guidelines to inform appropriate microphone placement 3.3 carry out correct interfacing of various sources in the modern studio
LO4 Be able to mix a recording to a professional technical and creative standard.	4.1 edit material accurately 4.2 produce appropriate registral placement using equalisation at the mixing stage of a recording 4.3 create appropriate depth and width at the mixing stage of a recording 4.4 use dynamic processors at the mixing stage of a recording 4.5 present a mastered recording adhering to industry standards.

Guidance

Links

This unit links with:

- *Unit 2: Acoustics*
- *Unit 3: Applied Music Production Techniques*
- *Unit 5: Audio Mastering and Manufacture*
- *Unit 6: Audio Post Production*
- *Unit 10: Composing for Film and Television*
- *Unit 23: Live Sound for Small Venues*
- *Unit 24: Live Sound Systems Specification and Operation*
- *Unit 34: Music Production Analysis*
- *Unit 35: Music Studio Production*
- *Unit 43: Principles of Musical Sound*
- *Unit 49: Sound Creation and Manipulation*
- *Unit 52: Studio Recording and Engineering.*

This unit also has links with the following National Occupational Standards:

Technical Theatre

- CPD1 Improving your skills
- CPD2b Ensure that you and your team keep up to date with the technical and production areas of the live arts
- HS1 Working safely
- CPD4a Contributing to technical production work for performance
- CPD4b Overseeing technical production work for performance
- HS2 Assessing risks (HSS6)
- HS5 Controlling risks (ENTO HSS2)
- HS3b Selecting and using safe systems for working at height (RC3)
- TP3.6a Contribute to the planning of sound requirements for a production (C2)
- TP3.6b Planning sound requirements for a production (C2)
- TP8.4 Setting up and checking sound equipment (C6)
- TP14.1a Getting in, fitting up and getting out (M4)
- TP20.4b Supervising sound operation for a live performance in the theatre
- TP23.1 Maintaining buildings or equipment (C12)
- TP5.6 Sourcing sound equipment
- MTP2 Cleaning up own work area.

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Essential requirements

It is important that technical resources match the level of this unit. Learners must be given the opportunity to work in a professionally installed multi-track facility with sufficient equipment to allow them to demonstrate the range of competencies expected of them. Learners must have access to a range of existing recordings that demonstrate excellence in production quality. It follows that resources should be of a quality that allows learners to emulate and even recreate these examples of excellence. Learners must have sufficient 'hands-on' time in the studio to allow their familiarity with the production process to become embedded.

Studio acoustic properties, isolation, control room acoustics and monitoring systems must be of a standard that allows quality judgements to be made at all stages of the process. It would be very helpful if learners also had the opportunity to work with performers and musicians of a professional standard, using instruments and equipment of a similar standard.

Employer engagement and vocational contexts

Contact with professional performers would prove useful to demonstrate professional practice in the studio. Professional levels of musicianship and sound quality as sources would highlight good recording practice.

Unit 36: Music Technology

Unit code: K/601/1359

Level: 4

Credit value: 15

Unit aim

The aim of this unit is to enable learners to apply the practical skills required to create music in contemporary production environments.

Unit abstract

Music technology is a subject that focuses upon the creation of music within the context of modern production environments. Contemporary music production covers a variety of disciplines, such as sequencing, audio recording, sampling, synthesis and associated compositional technique. However, this unit focuses on how these different techniques are integrated to form the basis of modern music production.

The unit is designed to give learners the confidence to produce music using a range of different methods and technologies. Learners will develop the practical skills associated with sequencing and audio recording. They will also develop the skills required to create musical composition using modern technology.

On completion of this unit learners will understand how the realisation of musical ideas can be achieved through the application of technology. Emphasis should be placed on transferable skills to give the learners confidence with a wide range of platforms and technology. The unit gives learners opportunities to investigate performance technique and musical scores; this helps understanding of the interaction between technology and performance and emphasises the need for good communication skills. Content can support understanding of related issues such as listening skills and computer architectures.

Learning outcomes

On successful completion of this unit a learner will:

1 Understand sound production within contemporary music making

2 Be able to create and control MIDI sequences using hardware and software

3 Be able to apply recording practice and technique to music creation

4 Be able to create a music composition using a software sequencing application.

Unit content

1 **Understand sound production within contemporary music making**

Digital Audio Workstation: design e.g. system architecture, interfaces, connections, sequencers, storage

Sequencers: features e.g. architecture, MIDI standards and protocols, MIDI sequencing, MIDI messages, software sound sources, hardware sound sources, audio sequencing

Studio recording: components e.g. acoustic instruments, electric instruments, human voice, microphones, DI boxes, mixing desk, separation, foldback and monitoring, audio recording

Production technique: concepts e.g. planning, collaboration, managing the environment, sound palettes, sound processing, mixing, mastering

2 **Be able to create and control MIDI sequences using hardware and software**

Sound sources and interfaces: software synthesisers; software samplers; hardware sound sources; presets; original sound creation; sound cards; sample and bit rates; MIDI input devices; connections

Composing and editing: tempo and time signature; key and pitch; timbre; style and genre; entering information; track types; editing functions; quantising; edit windows; mix windows; arranging

Advanced techniques: automation; MIDI controller maps; groove templates; replicating specific instruments

Computer issues: CPU load; RAM management; HDD management; file types and extensions; file handling; fault finding; back-up and storage

3 **Be able to apply recording practice and technique to music creation**

Recording: considerations e.g. studio set-up, recording chain and signal path, gain, signal- to-noise ratio, levels, monitoring, headphone mixes, latency, needs of the performer, tuning, recording for sample creation, click tracks

Microphones and DI boxes: function and choice e.g. dynamic, condenser, polar patterns, placement, separation; phantom power; microphone and line level; connections and leads

Multi-tracking: techniques e.g. separation, bed tracks, overdubbing, group performance, multiple headphone mixes, click tracks

Editing and mixing down: audio editing e.g. destructive and non-destructive editing, back-up, trim, fade in/fade out, normalise, tempo matching; sample creation e.g. strip silence, pitch shifting, time stretching; use of equalisation and effects, balance and stereo image, levels and dynamics, automation, basic mastering

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4 **Be able to create a music composition using a software sequencing application**

Integration: audio and MIDI e.g. MIDI sequences, virtual sound sources, live performance, sample patches, sample loops

Composition: technique e.g. form, timbre, arrangement, rhythm, melody, harmony, originality, authenticity, musicality, communication

Production: process e.g. editing, sound creation and manipulation, time management, mixing and mastering

Notation: graphic and standard e.g. time signature, key, tempo, dynamics, layout, editing, adding text, step versus score editor, display quantise, printing

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand sound production within contemporary music making	1.1 explain the architecture of a Digital Audio Workstation 1.2 explain music sequencing and available sound sources 1.3 explain the fundamental processes and components of studio recording 1.4 evaluate the planning and production process
LO2 Be able to create and control MIDI sequences using hardware and software	2.1 create a sound palette using a variety of synthesisers and samplers 2.2 create and edit a variety of MIDI sequences using different types of data input 2.3 demonstrate real-time control of sound sources using hardware and software 2.4 demonstrate effective computer skills in the creation of sequenced music
LO3 Be able to apply recording practice and technique to music creation	3.1 plan and produce recordings of individual performers 3.2 plan and produce recordings of ensembles 3.3 plan and produce audio material suitable for sample patches 3.4 demonstrate editing, mixing and mastering of recorded audio
LO4 Be able to create a music composition using a software sequencing application.	4.1 plan a music composition that utilises live and virtual sound sources 4.2 create music that incorporates competent musical technique 4.3 create music that incorporates competent production technique 4.4 produce scores that communicate relevant musical ideas.

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Guidance

Links

This unit links with:

- *Unit 1: Accessible Music Technology*
- *Unit 3: Applied Music Production Techniques*
- *Unit 12: Computer Music Composition and Production*
- *Unit 13: Computer Music Systems*
- *Unit 16: Critical Music Listening*
- *Unit 28: Music Composition Techniques*
- *Unit 30: Music in Context*
- *Unit 35: Music Studio Production*
- *Unit 41: Planning for Public Performance*
- *Unit 49: Sound Creation and Manipulation.*

This unit also has links with the following National Occupational Standards:

Technical Theatre

- CPD1 Improving your skills
- CPD2b Ensure that you and your team keep up to date with the technical and production areas of the live arts
- HS1 Working safely
- TP2.4a Contribute to developing and refining ideas for sound (C1)
- TP2.4b Developing and refining ideas for sound (C1).

Essential requirements

The unit is written with the understanding that learners are introduced to live and virtual sound production environments. Learners must have access to a variety of synthesisers, samplers and control interfaces such as keyboards and control surfaces.

Employer engagement and vocational contexts

It is important that learners understand the connection between the unit content and its potential to support their career aspirations. The ability to compose and produce music has a wide range of vocational outcomes within the music business and relevant connections need to be made in the delivery of the unit. For example, the skills learned can support careers in music composition, music production etc.

Links with employers are not necessary for the delivery and completion of this unit. However, it would be beneficial for learners to have contact with industry practitioners in areas such as music composition and studio production in order to understand current practice.

Unit 37: Music, Health and the Law

Unit code: Y/601/1339

Level: 4

Credit value: 15

Unit aim

This unit aims to enable learners to appreciate the impacts the music industry environment can have on the health of musicians by examining potential risks and applying safe working practices.

Unit abstract

There is much evidence to show that live music and music making can have a positive effect on the emotional health and wellbeing of individuals and communities.

At the same time there are many ways in which working in the music industry can have a detrimental effect on health, through physical hazards and over-exposure to noise, for example. This unit requires learners to examine the health and legal aspects of the music industry and to apply safe working practices within their daily operations. It deals with electricity, loudness, physical safety and risk assessment.

On completion of this unit learners will understand the positive effects that music can have on health and wellbeing and will be aware of some of the therapeutic activities that can be conducted with music. They will understand the detrimental effects that over-exposure to noise can have on hearing and the ways in which this can be prevented. They will analyse the physical risks involved in the music industry and will be informed about the legal aspects and the application of safe working practices.

Learning outcomes

On successful completion of this unit a learner will:

1 Understand the effects on health of exposure to noise

2 Understand the potential physical hazards of working with music and stage equipment

3 Understand health and safety legislation relevant to the music industry

4 Understand the ways in which music can have a positive effect on health and wellbeing.

Unit content

1 **Understand the effects on health of exposure to noise**

Ear: anatomy e.g. outer, middle and inner ear; sound pressure level; hearing e.g. frequency range, sensitivity; decibels e.g. legal thresholds

Hazards: damage; physical effects e.g. loss of hearing, tinnitus

Prevention: risks e.g. managing the risk, controlling, monitoring and reducing noise levels

2 **Understand the potential physical hazards of working with music and stage equipment**

Electrical devices: voltage; insulation; faulty appliances; dangers e.g. electric shock, fire and burns

Physical: mechanical e.g. lifting, carrying and posture; personal safety e.g. safety equipment, training, safety at height, repetitive strain injury (RSI); handling e.g. manual handling, mechanical, hoists, rigging, seating

3 **Understand health and safety legislation relevant to the music industry**

Legal: bodies e.g. Health and Safety Executive, Musicians' Union; frameworks e.g. Health and Safety at Work Act 1974, Control of Noise at Work Regulations 2005; working hours e.g. working time directives, licensing; fire safety law; local by-laws

Compliance: risk assessment; safety procedures; appliance testing; fire safety and prevention

4 **Understand the ways in which music can have a positive effect on health and wellbeing**

Health and wellbeing: emotional health e.g. reduction in stress levels, relaxing, energising, mood changing; means of expression e.g. self-esteem, confidence; the Mozart effect; physical effects e.g. pulse, breathing

Activities: therapeutic e.g. music therapy, listening, singing, drumming; community choirs; techniques e.g. Alexander

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Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand the effects on health of exposure to noise	1.1 recognise the anatomical principles behind hearing and hearing damage 1.2 assess the potential damage to the ear when working with music 1.3 explain ways in which hearing loss can be prevented
LO2 Understand the potential physical hazards of working with music and stage equipment	2.1 assess the risks involved with electric devices in the music industry 2.2 assess the physical risks involved in the music industry
LO3 Understand health and safety legislation relevant to the music industry	3.1 evaluate the legal frameworks relevant to the music industry 3.2 evaluate legal requirements when working in the music industry
LO4 Understand the ways in which music can have a positive effect on health and wellbeing.	4.1 explain the positive effects that music can have on health and wellbeing 4.2 evaluate therapeutic activities that can be used with music.

Guidance

Links

This unit links with:

- *Unit 29: Music Electronics and Maintenance*
- *Unit 49: Sound Creation and Manipulation*
- *Unit 52: Studio Recording and Engineering.*

This unit also has links with the following National Occupational Standards:

Technical Theatre

- CPD1 Improving your skills
- CPD2b Ensure that you and your team keep up to date with the technical and production areas of the live arts
- HS1 Working safely
- TP2.4a Contribute to developing and refining ideas for sound (C1)
- TP2.4b Developing and refining ideas for sound (C1).

Essential requirements

Websites are a particularly useful source of up-to-date information in this unit. The Health and Safety Executive (HSE) website, for example, will provide some excellent resources such as regulations and risk assessment guidelines.

Employer engagement and vocational contexts

There are opportunities within this unit to form links with local musicians and employers such as recording studios, live music venues and music outreach groups – those in hospitals, for example. These links could be through visits to venues, visiting speakers and shadowing placements.

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Unit 38: New Media Technology

Unit code: L/601/1659

Level: 5

Credit value: 15

Unit aim

The aim of this unit is to enable learners to create and operate internet-based content supported by an understanding of current practice and emerging developments.

Unit abstract

New media technology is an area of increasing relevance to musical practitioners. Traditionally, the music industry has always used a variety of methods to create, promote and distribute product, but artists often had to rely on specialists to accomplish these tasks for them. The emergence of the internet means artists can access distribution networks without the support of record labels and digital content creation has made all aspects of music production and marketing accessible to the individual.

The unit is designed to highlight the impact of existing and emerging technologies upon the role of music practitioner, with particular reference to the internet. Learners are given the opportunity to develop basic web design skills that include the creation of audio, graphics and video for online content. Learners also examine opportunities for creative collaboration via internet technology and web-based methods of musical product distribution.

On completion of this unit learners will have acquired a starting point to a wide range of skills that will support their vocational development within the music industry. As well as learning basic web design and graphics and video creation, learners will begin to understand how to individualise these elements to showcase their music and support their artistic profile. Although the unit is only an introduction to new media technology, learners should feel confident in their ability to continue research in this area and understand the relevance of reviewing and updating the relevant skills.

Learning outcomes

On successful completion of this unit a learner will:

1 Understand methods and systems for internet collaboration and distribution

2 Be able to create different file formats for audio, graphics and moving image

3 Be able to design and operate websites

4 Understand current and future developments in new media technologies.

Unit content

1 **Understand methods and systems for internet collaboration and distribution**

Peer-to-peer systems: e.g. real time collaboration, protocols, social networking, distributed networks, middleware, instant message systems, searching and sharing, social networking

Streaming media: e.g. streaming audio technology, video, internet radio, protocols, Real Player, QuickTime, Media Player

Uploading and downloading: e.g. file transfer protocol, storage systems, backing up, bandwidth, server issues, search engines, speed issues, servers, domain names and resolution

2 **Be able to create different file formats for audio, graphics and moving image**

File types: common audio file types e.g. MP3, WAV, FLAC; graphics file standards; video file standards; platform specific types

File format conversion: e.g. sample rate conversion, bit depth, compression, encryption, graphic and video file converters, cross-platform conversion, importing file types

Creating media content: e.g. using digital audio workstations, reducing file sizes, creating simple graphics, scanning images, digitising video, editing audio, editing video

3 **Be able to design and operate websites**

Basic web design: e.g. HTTP, HTML, scripting, tags, using web design software, exporting documents as web pages, forms, tables

Incorporating sounds and images: e.g. links, sound files, image files, image maps, colours, movie clips, buttons, adding files to web pages

Advanced techniques: e.g. JavaScript, Java Applets, VBScript, PHP, XML, DHTML, Perl and CGI, adding and using libraries, sources of code, new HTML tags, back-end databases, revenue collection e.g. PayPal

4 **Understand current and future developments in new media technologies**

Website developments: e.g. increasing bandwidth, improved interaction, real-time video and audio, automated agents, language developments

Internet distribution: e.g. legal issues, copyright issues, increased streaming bandwidth, playback systems, improving peer-to-peer systems, inter-enterprise collaboration

File types and formats: e.g. improved compression, increased standardisation, changing file standards, cross-platform standardisation, conversion, media creation tools

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Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand methods and systems for internet collaboration and distribution	1.1 assess peer-to-peer systems for internet collaboration and distribution 1.2 explain the possibilities offered by media streaming technologies 1.3 analyse issues surrounding internet-based music distribution
LO2 Be able to create different file formats for audio, graphics and moving image	2.1 produce common file types for audio, graphics and video 2.2 carry out file conversion between formats using a range of systems and techniques 2.3 create and justify media content
LO3 Be able to design and operate websites	3.1 design and justify web content that incorporates sound and image 3.2 demonstrate advanced techniques in the design and operation of websites
LO4 Understand current and future developments in new media technologies.	4.1 analyse internet developments that impact upon this field 4.2 review emerging methods of internet distribution 4.3 evaluate advances and improvements in file types and formats.

Guidance

Links

This unit links with:

- *Unit 5: Audio Mastering and Manufacture*
- *Unit 12: Computer Music Composition and Production*
- *Unit 13: Computer Music Systems*
- *Unit 15: Creative Arts Research Skills*
- *Unit 20: Improvisation in Music*
- *Unit 25: Managing A Creative Business*
- *Unit 26: Marketing the Creative Arts*
- *Unit 27: Music Business in the 21st Century*
- *Unit 32: Music Performance Skills*
- *Unit 33: Music Performance Studies*
- *Unit 42: Preparation, Process and Production in the Creative Arts*
- *Unit 46: Research Project*
- *Unit 47: Singing Techniques and Styles.*

This unit also has links with the following National Occupational Standards:

Community Arts

- CA2 Provide direction and leadership for your team
- CA7 Assist in pitching for community arts work
- CA8 Obtain and use research information
- CA9 Keep up to date with developments within the arts
- CA12 Understand how your community arts organisation can meet market needs and satisfy customer's needs
- CA16 Embracing diversity in your service provision.

Essential requirements

A range of related hardware and software must be available to match the constantly evolving content of the unit. Alongside the necessary IT resources, learners also need access to music workstations, graphics software and digital video facilities. A range of software must be available for the creation and integration of web content, although much of this may be already present in Macintosh and Windows operating systems.

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Employer engagement and vocational contexts

It is important that learners understand the connection between the unit content and its potential to support their career aspirations. Music is increasingly available via digital download and the internet is gradually becoming the preferred choice for the marketing and distribution of product. It also gives new artists the opportunity to connect to a much wider audience than was previously possible and a web-based profile is a basic requirement for any individual aiming to succeed in the music industry.

Links with employers are not necessary for the delivery and completion of this unit. However, it would be beneficial for learners to have contact with industry practitioners in areas such as management and marketing and promotion in order to reinforce the necessity for a broad base of skills.

Unit 39: Orchestration

Unit code: A/601/1320

Level: 5

Credit value: 15

Unit aim

This unit aims to develop the skill of combining instrumental timbres for learners to produce suitable and relevant impact and colours in context with the genre of the music.

Unit abstract

Orchestration is the art of combining instruments in a coherent and suitable manner to produce a new arrangement of an existing piece of music and/or realising the colours of an original composition.

Composers and arrangers require knowledge and understanding of a wide range of instruments, how they function, range of pitch and the variation in timbre, technical issues, capabilities and difficulties associated with each instrument. In addition, an element of imagination and experimentation would be an asset. In short, orchestration is the use and combination of instrumental timbres and colours.

The resulting score can be simple or complicated, which will include small numbers of instruments or large forces. Many instruments are written with traditional notation, but many are not, and when the composer/arranger is experimenting even traditional instruments will require non-traditional notation or the use of symbols to indicate what is desired. Increasingly, electronic instruments and world music sounds are used and need to be accommodated accordingly.

Listening to as much music as possible is essential for this unit. This will reveal a plethora of tonal expression, especially film music, which regularly has to cater for sounds and effects outside normal instrumental sounds. The art of orchestration (scoring music for a group of instruments) is one that has occupied composers and musicians for centuries and will continue to do so.

Learning outcomes

On successful completion of this unit a learner will:

1 Understand the characteristics and capabilities of traditional and non-traditional instruments

2 Understand notation techniques for traditional instruments

3 Understand notation techniques for electronic, non-traditional and world instruments

4 Be able to use orchestration techniques for various instrumental ensembles and groups.

Unit content

1 **Understand the characteristics and capabilities of traditional and non-traditional instruments**

Instruments: stringed e.g. violin, viola, cello, double bass, guitars (classical, acoustic), tunings, ranges, bowing, plucking, chords and double stops, string muting, harmonics, glissandi, effects and unique characteristics; blown e.g. flutes, piccolo, clarinets, oboe, bassoons, horns, trumpet, trombone, saxophones, tuba, other brass and woodwind, ranges, transpositions, mutes, fingering, effects and unique characteristics; keyboards and percussion e.g. pianos, organ, harpsichord, celeste, harp, xylophone, glockenspiel, marimba, timpani, bells, other tuned percussion, non-tuned percussion, membraphones, idiophones

Non-traditional, world music and other instruments: human voices; guitars (electric, bass); synthesisers; guitar effects; electronic instruments; samplers; non-western instruments e.g. string, blown, percussion

2 **Understand notation techniques for traditional instruments**

Traditional notation: score e.g. layout, groupings, pitch and rhythm notation, tempo and dynamic markings, notation conventions, piano music, polyphonic writing, rests, spacing and alignment, systems, rehearsal figures, part-writing, cues, transposing, clefs

Contemporary scoring: score e.g. layout for modern ensembles, alternative notation, shorthand, writing for non-readers, condensed scores, rhythmic notation

Modern rhythm section: instruments e.g. line-ups, piano and electric piano, organs, acoustic and electric guitars, bass guitar, tablature, double bass, drum kit, combos, chord charts, scoring rhythm section, lead sheets

3 **Understand notation techniques for electronic, non-traditional and world instruments**

Non-traditional and experimental: notation e.g. random music, alternate notation of pitch and rhythm, graphic scores, aleatoric scoring, rhythmic figures, quartertone, approximate pitches, arrhythmic music

Non-western instruments: instruments e.g. world, percussion, non-western stringed, blown instruments; non-western notation

Electronic instruments: notation e.g. synthesisers, sampled sounds, guitar effects, electronic instruments as acoustic re-creation, creating unique sounds

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4 **Be able to use orchestration techniques for various instrumental ensembles and groups**

Single family ensembles: ensembles e.g. vocal, string, woodwind choirs, brass section, saxophone and other reed groups, open and closed voicing, chords, clusters, counterpoint, homogeny, female voices, male voices

Mixed ensembles: bands e.g. brass and saxophone ensemble, wind bands, stock instrumental combinations, jazz and band ensembles, colour and texture, unison, scoring melody, voicing mixed instruments, choirs

Orchestra: standard groups e.g. small orchestra, full orchestra, instrumental numbers, voicing for orchestra, colour, texture, full orchestral tutti

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand the characteristics and capabilities of traditional and non-traditional instruments	1.1 assess the characteristics of stringed instruments 1.2 assess the characteristics of blown instruments 1.3 assess the characteristics of keyboard and percussion instruments 1.4 assess the characteristics of non-traditional and world music instruments
LO2 Understand notation techniques for traditional instruments	2.1 explain the ingredients of traditional notation 2.2 identify techniques of accommodating contemporary scoring requirements 2.3 explain notation for the modern rhythm section instruments
LO3 Understand notation techniques for electronic, non-traditional and world instruments	3.1 evaluate elements of non-traditional and experimental notation 3.2 evaluate notation possibilities for non-western instruments 3.3 select and justify notation techniques for electronic instruments
LO4 Be able to use orchestration techniques for various instrumental ensembles and groups.	4.1 produce scores for a single family instrumental group 4.2 produce scores for small mixed ensembles 4.3 demonstrate the elements of an orchestral score.

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Guidance

Links

This unit links with:

- *Unit 7: Aural Perception*
- *Unit 8: Band Rehearsal and Performance*
- *Unit 10: Composing for Film and Television*
- *Unit 11: Composition in Context*
- *Unit 16: Critical Music Listening*
- *Unit 18: Harmony and Arranging*
- *Unit 19: Harmony and Composition*
- *Unit 21: Keyboard Skills*
- *Unit 28: Music Composition Techniques*
- *Unit 31: Music Notation*
- *Unit 32: Music Performance Skills*
- *Unit 33: Music Performance Studies*
- *Unit 43: Principles of Musical Sound*
- *Unit 47: Singing Techniques and Styles*
- *Unit 48: Songwriting Techniques and Skills*
- *Unit 54: World Music Composition and Performance*
- *Unit 55: World Music Studies.*

Essential requirements

Learners must have access to a range of sample scores in a variety of styles and genres. Access to various ensembles to perform pieces will enable learners to constructively criticise their own work. A library of recorded arrangements is essential, preferably with accompanying scores. Although this unit is not a vehicle for studying the use of notation software, modern developments in the music publishing world make it essential for learners to have access to appropriate computer-based orchestration and notation software. This software should also have opportunities for MIDI playback, which will allow for pseudo performances of work undertaken. A range of sounds of appropriate quality must be available.

Employer engagement and vocational contexts

Possible industry links are limited because of the nature of the activity. However, practical input from any composer and arranger would be an invaluable experience for learners. Much of this discipline is learned through experience, and the opportunity for learners to have their music played. This may be limited within a college environment, especially for large ensembles. Practising composers and arrangers can advise on the practicalities of orchestration. Links with local choral societies and amateur orchestras are also valuable, especially those that would allow learners to attend rehearsals to observe (or better still participate). They may also be willing to try out any music the learners produce.

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Unit 40: Personal and Professional Development

Unit code: T/601/0943

Level: 5

Credit value: 15

Unit aim

This unit aims to help the learner become an effective and confident self-directed employee. This helps the learner become confident in managing their own personal and professional skills to achieve personal and career goals.

Unit abstract

This unit is designed to enable the learner to assess and develop a range of professional and personal skills to promote personal and career development. The unit aims to develop learners' ability to organise, manage and practise a range of approaches to improve their performance as self-directed learners in preparation for work or further career development.

The unit's emphasis is on the needs of the individual but within the context of how the development of self-management corresponds with effective team management in meeting objectives.

Learners will be able to improve their own learning, be involved with teamwork and be more capable of problem solving through the use of case studies, role play and real-life activities.

Learning outcomes

On successful completion of this unit a learner will:

1 Understand how self-managed learning can enhance lifelong development

2 Be able to take responsibility for own personal and professional development

3 Be able to implement and continually review own personal and professional development plan

4 Be able to demonstrate acquired interpersonal and transferable skills.

Unit content

1 **Understand how self-managed learning can enhance lifelong development**

Self-managed learning: self-initiation of learning processes; clear goal setting e.g. aims and requirements, personal orientation achievement goals, dates for achievement, self-reflection

Learning styles: personal preferences; activist; pragmatist; theorist; reflector e.g. reflexive modernisation theory; Kolb's learning cycle

Approaches: learning through research; learning from others e.g. mentoring/coaching, seminars, conferences, secondments, interviews, use of the internet, social networks, use of bulletin boards, newsgroups

Effective learning: skills of personal assessment; planning, organisation and evaluation

Lifelong learning: self-directed learning; continuing professional development; linking higher education with industry, further education, Recognition of Prior Learning, Apprenticeships, Credit Accumulation and Transfer Schemes

Assessment of learning: improved ability range with personal learning; evidence of improved levels of skill; feedback from others; learning achievements and disappointments

2 **Be able to take responsibility for own personal and professional development**

Self appraisal: skills audit (personal profile using appropriate self-assessment tools); evaluating self-management; personal and interpersonal skills; leadership skills

Development plan: current performance; future needs; opportunities and threats to career progression; aims and objectives; achievement dates; review dates; learning programme/activities; action plans; personal development plan

Portfolio building: developing and maintaining a personal portfolio

Transcripts: maintaining and presenting transcripts including curriculum vitae

3 **Be able to implement and continually review own personal and professional development plan**

Learning styles and strategies: types of styles; awareness of own personal style; impact of personal style and interactions with others

Learning from others: formal learning and training; observation; mentoring; supervision; tutorials; informal networks; team members; line managers; other professionals

Evaluation of progress: setting and recording of aims and objectives; setting targets; responding to feedback; re-setting aims targets; establishing and recognising strengths and weaknesses; directions for change; cycles of activity (monitoring, reflecting and planning)

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4 **Be able to demonstrate acquired interpersonal and transferable skills**

Transferable skills: personal effectiveness (ability to communicate effectively at all levels, initiative, self-discipline, reliability, creativity, problem solving)

Verbal and non-verbal communication: effective listening, respect of others' opinions; negotiation; persuasion; presentation skills; assertiveness; use of ICT

Delivery formats: ability to deliver transferable skills using a variety of formats

Working with others: team player; flexibility/adaptability; social skills

Time management: prioritising workloads; setting work objectives; using time effectively; making and keeping appointments; reliable estimates of task time

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand how self-managed learning can enhance lifelong development	1.1 evaluate approaches to self-managed learning 1.2 propose ways in which lifelong learning in personal and professional contexts could be encouraged 1.3 evaluate the benefits of self-managed learning to the individual and organisation
LO2 Be able to take responsibility for own personal and professional development	2.1 evaluate own current skills and competencies against professional standards and organisational objectives 2.2 identify own development needs and the activities required to meet them 2.3 identify development opportunities to meet current and future defined needs 2.4 devise a personal and professional development plan based on identified needs
LO3 Be able to implement and continually review own personal and professional development plan	3.1 discuss the processes and activities required to implement the development plan 3.2 undertake and document development activities as planned 3.3 reflect critically on own learning against original aims and objectives set in the development plan 3.4 update the development plan based on feedback and evaluation
LO4 Be able to demonstrate acquired interpersonal and transferable skills.	4.1 select solutions to work-based problems 4.2 communicate in a variety of styles and appropriate manner at various levels 4.3 evaluate and use effective time-management strategies.

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Guidance

Links

This unit links with:

- *Unit 17: Employability Skills*

and the following units from the Management Standards Centre National Occupational Standards:

- A2 Manage your own resources and professional development
- A3 Develop your personal networks
- D2 Develop productive working relationships with colleagues and stakeholders
- D9 Build and manage teams
- D12 Participate in meetings
- E11 Communicate information and knowledge.

Unit 41: Planning for Public Performance

Unit code: D/601/1715

Level: 5

Credit value: 15

Unit aim

The aim of this unit is to enable learners to develop the skills required to research, plan and manage productions for public music performance.

Unit abstract

A career as a live music practitioner is dependent on events management. From the freelance musician to the international professional, successful careers are developed through effectively planned performance events. This unit develops an awareness and understanding of the skills required for the process and production of musical events. It involves a study of planning procedures, pre-production/rehearsal scheduling, performance and the legislation relevant to a production. The unit offers learners opportunities to research current business practices through review and analysis of professional productions, developing an understanding of music events management. The unit will assist with the development of music productions from other practical units, acting as a means to document and assess the realisation of an event.

The unit is underpinned by research into current practices and legislation that governs performance events. Learners will be offered opportunities to plan and develop music productions for selected events. They will also develop skills in communication, with opportunities to network with professional companies, financial planning, logistics and marketing that are necessary in the completion of a professional event.

On completion of this unit learners will be able to demonstrate the processes involved in planning events for a public audience, working in accordance with event safety legislation and music law.

Learning outcomes

On successful completion of this unit a learner will:

1 Understand event management planning procedures

2 Be able to plan events using pre-production processes

3 Understand current legislation related to public performance

4 Be able to demonstrate performance processes.

Unit content

1 **Understand event management planning procedures**

Production roles: roles involved in event management processes e.g. artist, performer, agent, venue manager, technicians, stage manager, lighting, sound, sales, security, marketing, press, publicity and public relations, financial director

Production processes: planning activities e.g. programme design, audition and employment, set and light design, budgeting planning, profit and loss, logistics, risk assessment, event safety, equipment testing; performance activities e.g. artist management, rehearsal, continuity, soundcheck, live sound and lighting, technical support; administrative activities e.g. image design, branding, promotions, media and press coverage, online promotion, social networking, ticket sales, accounts, copyright, PRS, PPLUK

2 **Be able to plan events using pre-production processes**

Events planning: project strategies e.g. process planning, scheduling, time management, guerrilla marketing, Gantt project scheduling; group projects e.g. team roles, delegation of responsibilities, individual and group work, group presentations and meetings, progress reports review and action planning

Project processes: budgeting and financial management; marketing e.g. branding or event theme, posters and flyers, online networking, MySpace.com; communication with organisations e.g. event hire, lighting and sound, stage management, ticket sales, CD duplication, merchandising

3 **Understand current legislation related to public performance**

Safe working: project legislation e.g. current public performance law, legal requirements, performance licensing, copyright and PRS/PPLUK, fire legislation

Event legislation: event safety e.g. safety certificates, seating capacity, access and escape, security, stewarding and emergency services, staging arrangements, sight lines, equipment testing, risk assessments, stage get-in/get-out; organisations e.g. Musicians' Union, PRS For Music, MCPS, PPLUK, agents, booking office, lighting and sound

4 **Be able to demonstrate performance processes**

Presentation: realisation of planned events e.g. concerts, gigs, recording sessions, theatrical shows; presentation of processes e.g. sales pitch, financial forecasting, group presentation, market review

Evaluation: critical evaluation; individual and group achievement; project review; critique; self-assessment; peer assessment

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Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand event management planning procedures	1.1 assess the performance, management and administrative roles for a selected music project 1.2 review the production processes involved in a selected music project
LO2 Be able to plan events using pre-production processes	2.1 plan scheduled events in order to realise a music project 2.2 carry out production processes in order to realise a music project
LO3 Understand current legislation related to public performance	3.1 examine the legislation involved in public music performance events 3.2 review the safety requirements and legislation for a performance event
LO4 Be able to demonstrate performance processes.	4.1 carry out a group project culminating in a performance 4.2 present critical evaluations of a music project.

Guidance

Links

This unit links with:

- *Unit 8: Band Rehearsal and Performance*
- *Unit 9: Community Music Projects*
- *Unit 22: Live Sound for Large Venues*
- *Unit 23: Live Sound for Small Venues*
- *Unit 24: Live Sound Systems Specification and Operation*
- *Unit 25: Managing a Creative Business*
- *Unit 26: Marketing the Creative Arts*
- *Unit 27: The Music Business in the 21st Century*
- *Unit 32: Music Performance Skills*
- *Unit 33: Music Performance Studies*
- *Unit 42: Preparation, Process and Production in the Creative Arts*
- *Unit 47: Singing Techniques and Styles*
- *Unit 54: World Music Composition and Performance.*

This unit also has links with the following National Occupational Standards:

Community Arts

- CA2 Provide direction and leadership for your team
- CA7 Assist in pitching for community arts work
- CA8 Obtain and use research information
- CA9 Keep up to date with developments within the arts
- CA12 Understand how your community arts organisation can meet market needs and satisfy customer's needs
- CA16 Embracing diversity in your service provision.

Essential requirements

Resources must be appropriate for the planning and realisation of an event. This includes access to spaces for planning meetings and means for external communication and research facilities, including the internet and social networking sites. Further resources may be required depending on the nature of the project the learner undertakes, including product or reprographic duplication, merchandise manufacturers and organisations involved in live music events.

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Employer engagement and vocational contexts

Industry professional and music organisations are good sources of information about further training. It may be beneficial to plan workshops and visits into the delivery of the theoretical stages of the unit. Professional venues can give learners opportunities for experiencing the live work of artists and companies. Other colleges and local event venues are good for performances and workshops and centres should foster links with such bodies.

Unit 42: Preparation, Process and Production in the Creative Arts

Unit code: T/601/1719

Level: 5

Credit value: 20

Unit aim

This unit provides a practical framework for developing work in the creative arts from initial and preparatory ideas through the process culminating in the production of work.

Unit abstract

This unit deals with the practical application of skills and techniques required in the preparation and production of creative work. Learners will carry out their role or roles as part of a team working within a clearly defined project that facilitates the development of industry skills. The project brief should be negotiated, and identify a clear market or target audience. The development process is intended to allow learners to refine ideas, develop skills to produce work that culminates in for example a live event, public performance, or a recorded product. It is essential that learners during planning, process and production, that they apply and work within current legislative frameworks including operating and working safely. It is essential that learners apply industry practice that incorporates post-production reflection, review and evaluation.

Learners must show how work is developed for a target audience in response to a defined and negotiated brief culminating in finished work.

Learning outcomes

On successful completion of this unit a learner will:

1 Understand own and others' process, production and planning roles in creating a work

2 Be able to plan using production processes

3 Be able to work safely in a role that the individual has clearly defined within the negotiated project

4 Be able to prepare and produce work to deadline

5 Be able to evaluate the effectiveness of contributions to the preparation, process and production of the project.

Unit content

1 **Understand own and others' process, production and planning roles in creating a work**

Management and administration: the remit and responsibilities of key personnel e.g. producer, executive director, personal assistant, recording studio manager, venue or company manager, the promotion team including marketing, press, publicity and public relations, agent or personal manager, casting director, house manager, studio manager, education officer

Performance team: the remit and responsibilities of key personnel e.g. director, artistic director, record producer, writer, composer, choreographer, musical director, session musicians, session performers

Design team: the remit and responsibilities of key personnel e.g. set designer, costume designer, lighting designer, sound designer, graphic designer

Production and technical team: the remit and responsibilities of key personnel e.g. production manager, sound engineer, stage manager, lighting and sound technicians, assistant director, voice, movement/fight coach

2 **Be able to plan using production processes**

Initial brief: considerations e.g. analysis, project requirements, deadlines, human and physical resources

Budget and resource: constraints e.g. establishing budgets, financial methods and procedures, available versus ideal resources

Planning and organisation: elements e.g. timescale, pre-production, production, post-production, team goals, marketing

Preparation: materials selected for performance; materials used for performance

Cultural: how artists respond in reference to their own and other cultures in their preparation of work for performance

Structure: planning e.g. time management, aesthetic, considerations, ethical considerations, drafts, demos

Rehearsals: type e.g. rehearsal plans, production meetings, technical rehearsals, dress rehearsals, previews

Reflection: review work e.g. progress meetings and reports, self-assessment, peer assessment

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3 **Be able to work safely in a role that the individual has clearly defined within the negotiated project**

Agreed deadline: considerations e.g. time management, problem solving, team goals, individual goals, resource management, financial forecasting

Safe working: requirements e.g. current legislation, legal requirements, performance licensing and fire legislation

Local legislation: considerations e.g. safety certificates, seating capacity, access and escape, public address installation, staging arrangements, sight lines, production details, barriers and fencing, evacuation plan, mixers, delay towers and temporary towers, policing and security, stewarding and emergency services

Industrial legislation appropriate to sector e.g. Employment Law, Health and Safety, Equality, Diversity and Disability Access, Copyright and Royalties

Industrial practices: appropriate to sector e.g. Equity, Musicians' Union, Sector Skills Council, BECTA, MCPS, PRS for Music, casting directors, agents, management, administration and production staff

4 **Be able to prepare and produce work to deadline**

Content: format e.g. concerts, gigs, events, recordings, dance, theatrical shows

Communicate: instructions e.g. through performance, production, workshop lecture demonstration, recording

Deadlines: e.g. technical rehearsal, dress rehearsal, soundcheck, financial, logistical, sub-contractors, contractors, suppliers, equipment hire, fire inspections, venue availability

Management: monitoring; measuring; motivation; realistic targets; SMART; correspondence with description; fitness for purpose; schedule v deadline; project management

5 **Be able to evaluate the effectiveness of contributions to the preparation, process and production of the project**

Personal development: e.g. working with others, specialist learning and access needs, analysis, reflection, management skills

Evaluation: review e.g. personal evaluation, team evaluation, feedback, new and existing skills and techniques

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand own and others' process, production and planning roles in creating a work	1.1 categorise individual roles and responsibilities in planning and producing a work 1.2 discuss own responsibilities in planning a work 1.3 discuss responsibilities of others in planning a work
LO2 Be able to plan using production processes	2.1 produce an audit of the resource requirements as part of a plan 2.2 contribute to individual and collaborative production processes identifying key roles and responsibilities
LO3 Be able to work safely in a role that the individual has clearly defined within the negotiated project	3.1 specify and justify the scope of own role/s' function within the agreed production 3.2 devise a risk assessment specific to the role/s as part of the agreed plan 3.3 select and justify working practice with regard to health and safety and current legal practices within role/s and throughout the production
LO4 Be able to prepare and produce work to deadline	4.1 contribute to the creation of a finished product to agreed deadlines 4.2 carry out the completed project that reflects the initial plan and development processes 4.3 ensure the quality of outcomes using appropriate management techniques
LO5 Be able to evaluate the effectiveness of contributions to the preparation, process and production of the project.	5.1 report on strategies used to pursue personal development 5.2 critically evaluate team and individual work.

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Guidance

Links

This unit links with:

- *Unit 15: Creative Arts Research Skills*
- *Unit 25: Managing A Creative Business*
- *Unit 26: Marketing the Creative Arts*
- *Unit 46: Research Project*
- *Unit 47: Singing Techniques and Styles.*

This unit also has links with the following National Occupational Standards:

Community Arts

- CA2 Provide direction and leadership for your team
- CA7 Assist in pitching for community arts work
- CA8 Obtain and use research information
- CA9 Keep up to date with developments within the arts
- CA12 Understand how your community arts organisation can meet market needs and satisfy customer's needs
- CA16 Embracing diversity in your service provision

Music Business (Record Labels)

- RCS 2 Track royalties and produce invoices within a music business context
- RCS13 Understanding collecting societies and keeping up to date with the music industry
- MB07 Identify and propose new revenue streams and opportunities for music business
- MB10 Understanding the music industry and keeping up to date
- MB13 Understand how artist agreements and contracts work
- MB17 Contribute to assessing the impact of emerging technology for the music business
- MP28 Understand copyright and how copyright can be used to generate income in a music business environment.

Essential requirements

This unit will require tutor review in the initial stages, while the project brief is being defined and learner roles are established. Learners will be required to take responsibility for planning and developing courses of action including, where relevant, responsibility for the work of others.

Regular evaluative progress meetings must be provided to allow for guidance and feedback at key points within the project. At the end of the unit, evaluation sessions must take place and relevant staff should provide feedback.

Resources available to learners must be appropriate to the chosen discipline. It is essential that resources and spaces must be comparable with industry standards. These resources must be available at appropriate points within the project timescale and learners must have sufficient access to achieve work of industry standard.

Learners must also have access to spaces for planning meetings and other general resources as necessary. This unit will require the delivery of theoretical information and availability of appropriate space/s for performance/production work to develop techniques.

Learners must be encouraged to be experimental, innovative and entrepreneurial when undertaking this unit.

Employer engagement and vocational contexts

This unit gives an ideal context for engaging with a range of creative and cultural communities directly through venues or through arts organisations, artists or support agencies. These can be located in the immediate community, locally, regionally, nationally or even internationally given the appropriate context. In addition, local universities, arts centres and training providers are good sources of information about further training, and can be useful venues for experiencing the live work of artists and companies.

Other colleges, schools and education providers make good venues for learners' performances and workshops; centres should be encouraged to foster, engage with, and make partnerships and links with such bodies. Work placements can provide a valuable source of primary research and develop and locate new, often less obvious performance venues. Local authorities can often assist with possible alternative venues and partners, e.g. regeneration schemes for underdeveloped sites in the locality.

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Unit 43: Principles of Musical Sound

Unit code: D/601/1763

Level: 4

Credit value: 15

Unit aim

The aim of this unit is to enable learners to explore the fundamental scientific basis of sound to gain an insight that will support their musical practice.

Unit abstract

This unit provides a working knowledge of the principles of sound, particularly in those areas related to music making and live sound. This is supported through the study of the physical properties of sound, human hearing, musical instruments and the environments where they are played.

The scientific base of musical sound is an accessible and incredibly useful set of knowledge. This knowledge is something that will support a musical career and deliver solutions to many common problems which musicians and music technologists face on a regular basis. Understanding the theory of sound, and of hearing, unlocks many pathways in musical employment and also enjoyment in musical life. It also addresses some key health and safety messages that are crucial for a sustainable career.

The unit is concerned with the qualitative analysis of sound and is designed to give learners a good basis from which to understand the way that instruments work. They should also understand why it is important to take into account the acoustics of a performance environment and the effect this has on the performers, the overall sound and the audience. Learners will develop listening skills and an awareness of different acoustic environments. They will consider the acoustic properties of instruments and how the environment in which they are played affects the sound they produce.

The unit is not concerned with the mathematical calculations and measurement of sound; however, demonstration and awareness of measurement instruments and related software may be used in the learning process.

Knowledge of theory can be assessed through coursework and written examinations or tests. Listening skills can be continuously assessed over the duration of the unit and evidence can be generated by written work based on audio examples given to the learner to make comments.

Learning outcomes

On successful completion of this unit a learner will:

1 Understand the theory of sound

2 Understand the theory of hearing

3 Understand the acoustic properties of instruments and voices

4 Understand the acoustic properties of performance areas.

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Unit content

1 **Understand the theory of sound**

Waveforms: theory e.g. frequency, amplitude, constructive and destructive interference, standing waves, the properties and behaviour of sound waves in different media, loudness and sound pressure levels, speeds of sound

Harmonics: harmonic series and non-harmonic partials e.g. fundamentals, phase addition and cancellation, additive synthesis; the relationship of harmonics to scales and temperaments; spectrum analysis; resynthesis

2 **Understand the theory of hearing**

Physiology of hearing: the structure of the human ear; frequency analysis in the cochlea; the audible sound spectrum; masking and filtering; hearing damage; protecting the hearing; tinnitus

Psychology of hearing: brain processing of directional and temporal information e.g. stereo perception and the creation of surround sound illusions; localisation e.g. stereo field, surround field, psycho-acoustic considerations, phase

Listening: models e.g. holistic listening, listening for pitch, timing and balance, listening for timbre, listening for stereo, surround, depth perspectives, spectral placement

3 **Understand the acoustic properties of instruments and voices**

Generators and resonators: Hornbastel-Sachs system e.g. chordophone, idiophone, membranophone, aerophone, electrophone

Timbre, transients and envelopes: physical e.g. influence of physical form on sound; envelope e.g. attack, decay, sustain and release; mutes

4 **Understand the acoustic properties of performance areas**

Location: ideal acoustic characteristics for various performances or recording situations; ideal acoustics for music and speech e.g. reverb time, decay, absorption and reflection; design principles

Treatment: context e.g. absorption, reflection, reverb time, designing and modifying spaces, acoustic treatment and insulation, materials, manufacturing of materials for construction, construction techniques, hi-tech solutions and low-tech solutions, professional and project-based scenarios

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand the theory of sound	1.1 explain the attributes of sound waves 1.2 explain the theoretical basis of the harmonic series and non-harmonic partials
LO2 Understand the theory of hearing	2.1 explain the physiology of hearing and the causes for loss of hearing 2.2 explain the principles of localisation and perception of distance 2.3 analyse music using a range of listening models
LO3 Understand the acoustic properties of instruments and voices	3.1 explain the acoustical properties of sound generators and resonators 3.2 assess the impact of physical form on the sound of an instrument
LO4 Understand the acoustic properties of performance areas.	4.1 assess the suitability of a location for performances or recording situations 4.2 present a range of acoustic treatment solutions to enhance the sound of a location.

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Guidance

Links

This unit links with:

- *Unit 2: Acoustics*
- *Unit 35: Music Studio Production*
- *Unit 49: Sound Creation and Manipulation*
- *Unit 52: Studio Recording and Engineering.*

This unit also has links with the following National Occupational Standards:

Technical Theatre

- CPD1 Improving your skills
- CPD2b Ensure that you and your team keep up to date with the technical and production areas of the live arts
- HS1 Working safely
- TP8.4 Setting up and checking sound equipment
- TP5.6 Sourcing sound equipment

Live Events and Promotion

- LE7 Identify suppliers of materials and equipment for the running of a live event.

Essential requirements

Learners must have access to a range of musical instruments to include at least one chordophone, aerophone, membranophone and idiophone. It will be helpful to have a monochord and custom-made 'instruments', which will allow the same tube to be sounded by a flute, reed, and brass mouthpiece. Computer software must be used to illustrate resynthesis, the measuring of sound and FFT analysers. Centres should also consider computer software-based alternatives to the above, where appropriate.

Unit 44: Project Design, Implementation and Evaluation

Unit code: L/601/0995

Level: 5

Credit value: 20

Unit aim

This unit aims to develop learners' skills of independent enquiry by undertaking a sustained investigation of direct relevance to their vocational, academic and professional development.

Unit abstract

This unit provides opportunities to develop skills in decision making, problem solving and communication, integrated with the skills and knowledge developed in many of the other units within the programme to complete a realistic project.

It requires the learner to select, plan, implement and evaluate a project and finally present the outcomes, in terms of the process and the product of the project. It also allows learners to develop the ability to work individually and/or with others, within a defined timescale and given constraints, to produce an acceptable and viable solution to an agreed brief.

If this is a group project, each member of the team must be clear about their responsibilities at the start of the project and supervisors must ensure that everyone is accountable for each aspect of the work and makes a contribution to the end result.

Learners must work under the supervision of programme tutors or work-based managers.

Learning outcomes

On successful completion of this unit a learner will:

1 Be able to formulate a project

2 Be able to implement the project within agreed procedures and to specification

3 Be able to evaluate the project outcomes

4 Be able to present the project outcomes.

Unit content

1 **Be able to formulate a project**

Project selection: researching and reviewing areas of interest; literature review; methods of evaluating feasibility of projects; initial critical analysis of the outline specification; selection of project option; initiating a project log-book/diary; estimating costs and resource implications; identifying goals and limitations; value of project; rationale for selection; agree roles and allocate responsibilities (individually with tutor/supervisor and within project group if appropriate)

Project specifications: developing and structuring a list of requirements relevant to project specifications e.g. costs, timescales, scale of operation, standards, legislation, ethics, sustainability, quality, fitness for purpose, business data, resource implications

Procedures: planning and monitoring methods; operating methods; lines of communication; risk analysis; structure of groups and collaborative working e.g. learner groups or roles and responsibilities within a work-based project, targets and aims

Project plan: production of a plan for the project including timescales, deliverables, milestones, quality assurance systems and quality plans, and monitoring progress

2 **Be able to implement the project within agreed procedures and to specification**

Implement: proper use of resources; working within agreed timescale; use of appropriate techniques for generating solutions; monitoring development against the agreed project plan; maintaining and adapting project plan where appropriate

Record: systematic recording of relevant outcomes of all aspects and stages of the project to agreed standards

3 **Be able to evaluate the project outcomes**

Evaluation techniques: detailed analysis of results; conclusions and recommendations; critical analysis against the project specification and planned procedures; use of appropriate evaluation techniques; application of project evaluation and review techniques (PERT); opportunities for further studies and developments

Interpretation: use of appropriate techniques to justify project progress and outcomes in terms of the original agreed project specification

Further consideration: significance of project; application of project results; implications; limitations of the project; improvements; recommendations for further consideration

4 **Be able to present the project outcomes**

Record of procedures and results: relevant documentation of all aspects and stages of the project

Format: professional delivery format appropriate to the audience; appropriate media

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Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Be able to formulate a project	1.1 formulate and record possible outline project specifications 1.2 identify the factors that contribute to the process of project selection 1.3 produce a specification for the agreed project 1.4 produce an appropriate project plan for the agreed project
LO2 Be able to implement the project within agreed procedures and to specification	2.1 match resources efficiently to the project 2.2 undertake the proposed project in accordance with the agreed specification 2.3 organise, analyse and interpret relevant outcomes
LO3 Be able to evaluate the project outcomes	3.1 use appropriate project evaluation techniques 3.2 interpret and analyse the results in terms of the original project specification 3.3 make recommendations and justify areas for further consideration
LO4 Be able to present the project outcomes.	4.1 produce a record of all project procedures used 4.2 use an agreed format and appropriate media to present the outcomes of the project to an audience.

Guidance

Links

This unit is suitable for use by all sectors and should utilise the full range of skills developed through study of other units in the programme. These include planning, practical work, data handling and processing, analysis and presentation.

The knowledge applied may link to one particular unit or to a number of other units.

Essential requirements

The required resources will vary significantly with the nature of the project. The identification of the equipment and materials required, and the establishment of their availability, is a vital part of the planning phase. Learners should therefore have access to a wide variety of physical resources and data sources relevant to the project. Tutors should ensure that learners do not embark on work that cannot succeed because of lack of access to the required resources.

Employer engagement and vocational contexts

Centres should try to establish relationships with appropriate organisations in order to bring realism and relevance to the project.

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Unit 45: Public Performance Technology

Unit code: Y/601/1311

Level: 5

Credit value: 15

Unit aim

The aim of this unit is to enable learners to be aware of the way in which technology can be creatively integrated into a musical performance.

Unit abstract

This unit involves the study of hardware and software currently being used in performance events and examines the way in which this technology is being used by contemporary artists. It provides an opportunity for learners to combine both these areas of knowledge to stage their own performance in which performance technology plays a central role.

Most of the techniques and ideas introduced in this unit can be delivered through the use of demonstrations and practical, supervised 'hands-on' workshops during which specific queries can be answered. Learners should be encouraged to manage their own programme for the research into contemporary practitioners.

The main evidence for this unit will be the finished product: a performance making highly imaginative and creative use of technology. This can take the form of a musical performance in front of an audience, but may also provide the opportunity for cross-disciplinary work with other art forms or interactive media. The breadth and thoroughness of initial research on current practitioners will influence the level of creativity reached in the performance.

The evidence for effective planning will be self-evident from how well the performance runs, but could be backed up by a portfolio of documentary evidence – production and rehearsal schedules, marketing information etc.

Learning outcomes

On successful completion of this unit a learner will:

1 Understand performance orientated software

2 Understand performance orientated hardware

3 Understand current applications for performance technology and their current practitioners

4 Be able to stage a public performance.

Unit content

1 **Understand performance orientated software**

Protocols: MIDI e.g. note messages, controller messages, system exclusive, MIDI time-code; Open Sound Control; CV to MIDI conversion

Functionality: composition; live processing; signal routing; sequencing; live sampling; programming software e.g. Max/MSP, Supercollider, CSound, Audiomulch; software instruments e.g. Reaktor, Live

2 **Understand performance orientated hardware**

Hardware MIDI controllers: physical triggers e.g. custom-made performance input devices, use of physical elements for trigger sources, design of triggers and hardware input devices; dedicated hardware controllers; commercially available controller systems for performance

Real-time processing of acoustic instruments and sound: hardware for real-time live sampling and processing; user control of performance parameters

3 **Understand current applications for performance technology and their current practitioners**

Instruments: applications e.g. instrument-specific technology, customised instruments, recent developments in instrument technology, technology used by contemporary performers, integration of contemporary technology with performance

Key practitioners: personalities e.g. landmark figures, contemporary performances, installations

Cross-over and new technology: developments e.g. use of MIDI in the control of technology used in other art forms, integration of music technology with other art forms, joint performance via the internet, new performance opportunities afforded by contemporary hardware and software technology, real-time MIDI control of video

4 **Be able to stage a public performance**

Effective rehearsal: time e.g. scheduling, organisation and timetabling, rehearsal techniques, directing rehearsals, technical and in-situ rehearsals

Presentation: considerations e.g. stage considerations, cables and interconnections, VDUs, audience view, lighting, venue considerations, performance space, performance form and setting, accessibility for audience and performers

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Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand performance orientated software	1.1 assess the protocols used by performance orientated software 1.2 assess the functionality of a range of performance orientated software
LO2 Understand performance orientated hardware	2.1 evaluate hardware MIDI controllers in the context of a live performance 2.2 assess real-time processes of a range of hardware processors
LO3 Understand current applications for performance technology and their current practitioners	3.1 explain technology used by current practitioners to enhance performance means and instruments 3.2 evaluate key practitioners in the field of performance technology 3.3 assess emerging possibilities brought about by performance technology's advances
LO4 Be able to stage a public performance.	4.1 plan and contribute to effective rehearsals to realise a performance using technology 4.2 produce work using performance technology to be performed in front of an audience.

Guidance

Links

This unit links with:

- *Unit 11: Composition in Context*
- *Unit 12: Computer Music Composition and Production*
- *Unit 22: Live Sound for Large Venues*
- *Unit 23: Live Sound for Small Venues*
- *Unit 24: Live Sound Systems Specification and Operation*
- *Unit 25: Managing a Creative Business*
- *Unit 26: Marketing the Creative Arts*
- *Unit 27: The Music Business in the 21st Century*
- *Unit 28: Music Composition Techniques*
- *Unit 30: Music in Context*
- *Unit 32: Music Performance Skills*
- *Unit 33: Music Performance Studies*
- *Unit 42: Preparation, Process and Production in the Creative Arts*
- *Unit 47: Singing Techniques and Styles.*

This unit also has links with the following National Occupational Standards:

Community Arts

- CA2 Provide direction and leadership for your team
- CA7 Assist in pitching for community arts work
- CA8 Obtain and use research information
- CA9 Keep up to date with developments within the arts
- CA12 Understand how your community arts organisation can meet market needs and satisfy customer's needs
- CA16 Embracing diversity in your service provision.

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Essential requirements

In this unit learners will need to have a firm grasp of MIDI protocols. Although it could be acquired in the course of this unit, previous learning on the subject will permit learners to concentrate on more advanced concepts. In addition they should be familiar with computer music production and audio production techniques.

Specific equipment for this unit includes hardware processors such as Kaoss Pad or other programmable processors as well as MIDI controllers. Depending on the nature of the project realised, a number of sensors and CV to MIDI converters are highly recommended, as well as video motion-tracking software.

Employer engagement and vocational contexts

Centres should develop links with local venues to give learners wider experience of acoustic spaces and performance technology.

Links with employers are beneficial to the delivery of the programme for work experience and future employment.

Unit 46: Research Project

Unit code: K/601/0941

Level: 5

Credit value: 20

Unit aim

To develop learners' skills of independent enquiry and critical analysis by undertaking a sustained research investigation of direct relevance to their higher education programme and professional development.

Unit abstract

This unit is designed to allow learners to become confident in the use of research techniques and methods. It addresses the elements that make up formal research including the proposal, a variety of methodologies, action planning, carrying out the research itself and presenting the findings. To complete the unit satisfactorily, learners must also understand the theory that underpins formal research.

The research itself is dependent on the learner, the context of their area of learning, their focus of interest and the anticipated outcomes. The unit draws together a range of other areas of content within the programme of study to form a holistic piece of work that makes a positive contribution to the learner's area of interest. Learners should seek approval from their tutors before starting the study.

Learning outcomes

On successful completion of this unit a learner will:

1 Understand how to formulate a research specification

2 Be able to implement the research project within agreed procedures and to specification

3 Be able to evaluate the research outcomes

4 Be able to present the research outcomes.

Unit content

1 **Understand how to formulate a research specification**

Research formulation: aims and objectives; rationale for selection; methodology for data collection and analysis; literature review; critique of references from primary sources e.g. questionnaires, interviews; secondary sources, e.g. books, journals, internet; scope and limitations; implications e.g. resources

Hypothesis: definition; suitability; skills and knowledge to be gained; aims and objectives; terms of reference; duration; ethical issues

Action plan: rationale for research question or hypothesis; milestones; task dates; review dates; monitoring/reviewing process; strategy

Research design: type of research e.g. qualitative, quantitative, systematic, original; methodology; resources; statistical analyses; validity; reliability; control of variables

2 **Be able to implement the research project within agreed procedures and to specification**

Implement: according to research design and method; test research hypotheses; considering test validity; reliability

Data collection: selection of appropriate tools for data collection; types e.g. qualitative, quantitative; systematic recording; methodological problems e.g. bias, variables and control of variables, validity and reliability

Data analysis and interpretation: qualitative and quantitative data analysis – interpreting transcripts; coding techniques; specialist software; statistical tables; comparison of variable; trends; forecasting

3 **Be able to evaluate the research outcomes**

Evaluation of outcomes: overview of the success or failure of the research project e.g. planning, aims and objectives, evidence and findings, validity, reliability, benefits, difficulties, conclusion(s)

Future consideration: significance of research investigation; application of research results; implications; limitations of the investigation; improvements; recommendations for the future, areas for future research

4 **Be able to present the research outcomes**

Format: professional delivery format appropriate to the audience; appropriate media

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Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand how to formulate a research specification	1.1 formulate and record possible research project outline specifications 1.2 identify the factors that contribute to the process of research project selection 1.3 undertake a critical review of key references 1.4 produce a research project specification 1.5 provide an appropriate plan and procedures for the agreed research specification
LO2 Be able to implement the research project within agreed procedures and to specification	2.1 match resources efficiently to the research question or hypothesis 2.2 undertake the proposed research investigation in accordance with the agreed specification and procedures 2.3 record and collate relevant data where appropriate
LO3 Be able to evaluate the research outcomes	3.1 use appropriate research evaluation techniques 3.2 interpret and analyse the results in terms of the original research specification 3.3 make recommendations and justify areas for further consideration
LO4 Be able to present the research outcomes.	4.1 use an agreed format and appropriate media to present the outcomes of the research to an audience.

Guidance

Links

This unit may be linked to single or several units in the programme, depending on the research topic and the context of their area of learning. It can be linked to *Unit 53: Work-based Experience* and gives the learner the opportunity to undertake research in the same organisation in which they undertook their placement.

Essential requirements

The tutor will need to establish the availability of resources to support the independent study before allowing the learner to proceed with the proposal.

Employer engagement and vocational contexts

Centres should try to establish relationships with appropriate organisations in order to bring realism and relevance to the research project.

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Unit 47: Singing Techniques and Styles

Unit code: J/601/1613

Level: 4

Credit value: 15

Unit aim

This unit aims to enable learners to sing by exploring how the voice works in theory and practice and in the application of skills and techniques leading to performance.

Unit abstract

This unit is intended to inform learners of the current practice associated with techniques and skills and their applications for the singing performer. Essential aspects include the study of the physiology of the voice and an understanding of how sound is made, controlled and refined. Learners will study a wide variety of singing styles focusing on two. The unit will culminate in performances of material for solo, duo and group singing.

This unit deals with the practical application of skills and vocal techniques required to produce work in contrasting styles and in a range of applications under performance conditions. Skills and techniques are developed through practical workshops leading to presentations under performance conditions. Workshops are intended to be developmental, allowing learners to refine skills and techniques that culminate in, for example, a live event, public performance, or recorded product.

Through underpinning research into current and contemporary singers and singing styles, the practical and theoretical components of this unit will contribute to and provide the opportunity to demonstrate learners' ability to learn, practise and apply singing techniques through the choice of materials presented for performance. Learners will study the principles of singing, and research, develop and learn the techniques for themselves and others, under working conditions.

Learners must demonstrate that they have developed and applied skills and techniques under performance conditions. It is essential that learners apply techniques that ensure that personal health and safety are taken into account.

Learning outcomes

On successful completion of this unit a learner will:

1 Understand the structure and physiology of the human voice

2 Be able to implement a wide range of vocal techniques

3 Be able to apply techniques to contrasting singing styles

4 Be able to perform a collection of songs for solo, duo and group.

Unit content

1 **Understand the structure and physiology of the human voice**

Body: posture; whole body supports production of voice; balance; strength

Voice: larynx; vocal chords; shape; resonance; warming up and protecting voice

Diaphragm: physiology e.g. structure, breathing; role in supporting sound and escape of air, action of muscle

Vocal health: medical e.g. conditions, resources, common ailments; developing vocal stamina; ear defences

2 **Be able to implement a wide range of vocal techniques**

Breathing: deep breathing; snatching breath; control of breath; using muscles to control exhalation

Posture: correcting posture to allow muscles to work effectively; jaw position; space created in mouth to amplify sound; position of tongue

Articulation: vowel sounds; diphthongs; consonants; legato singing; phrasing

Rehearsal and performance: skills development e.g. stamina, vocal capacity, listening and aural skills, personal

3 **Be able to apply techniques to contrasting singing styles**

Study and research: learners may study a variety of styles then focus on two e.g. jazz, opera, popular, folk, Carnatic, Samagana, Isicathamiya

Practice techniques: effective use of time; registers; posture; breathing; resonance; range and dynamics; diction; skills e.g. basic sight singing, ear training, working on repertoire, scales, vocal exercises

Working with style: study singers and songs from different styles; selection of suitable material

Health and safety: applied vocal health; ear defence; vocal warm-up exercises

4 **Be able to perform a collection of songs for solo, duo and group**

Rehearsals: two- and three-part harmony; intervals; singing together; accompaniment; listening critically; organising and scheduling

Performances: coordination; breathing; clarity; projection; movement; stage presence; memorisation of material; ability to correct poor intonation in performance; microphone technique; communication with other musicians; learning lyrics and performance techniques

Audience communication: relaxed posture; strong eye contact; effective facial expression; appropriate dress; good dynamics; choice of material to suit audience

Evaluation: record to analyse critically; reflective analysis; self/peer feedback

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Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand the structure and physiology of the human voice	1.1 explain the structure and physiology of the voice 1.2 analyse the processes involved in voice production 1.3 discuss the applications of vocal health for singers
LO2 Be able to implement a wide range of vocal techniques	2.1 select and justify techniques in rehearsal and performance 2.2 assess personal weaknesses and develop strategies for improvement
LO3 Be able to apply techniques to contrasting singing styles	3.1 demonstrate different singing styles 3.2 carry out a practice schedule as a soloist and as a member of an ensemble
LO4 Be able to perform a collection of songs for solo, duo and group.	4.1 take an active role in rehearsals and performances 4.2 perform songs for a solo, duo and in a group 4.3 produce evaluative and reflective reports on singing techniques and skills from rehearsals and performances.

Guidance

Links

This unit links with:

- *Unit 7: Aural Perception*
- *Unit 8: Band Rehearsal and Performance*
- *Unit 18: Harmony and Arranging*
- *Unit 20: Improvisation in Music*
- *Unit 31: Music Notation*
- *Unit 33: Music Performance Studies.*

Essential requirements

This unit will require access to a good research archive. In addition learners must have access to relevant primary and secondary resource materials. This material may include books, periodicals, internet, research papers, video and audio recordings and live performance. The mixture of theory and practice indicates the need to locate the delivery of this unit in suitable and flexible spaces.

There must be a good range of stimulus and research materials generally available: books, magazines, photographs, DVDs, videos and films. Basic video-recording and playback resources are needed.

Employer engagement and vocational contexts

This unit gives an ideal context for engaging with a range of creative and cultural communities directly through venues or through arts organisations, artists or support agencies. These can be located in the immediate community, locally, regionally, nationally or even internationally given the appropriate context. In addition local universities, arts centres and training providers are good sources of information about further training, and can be useful for exploring and experiencing the live work of artists and companies in the context of this unit.

Other colleges, schools and education providers make good contacts for workshops, and centres should be encouraged to foster links with such bodies and establish partnerships. Work placements may provide a valuable source of primary research and develop and locate new, often less obvious, employer contacts.

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Unit 48: Songwriting Techniques and Skills

Unit code: M/601/1606

Level: 4

Credit value: 15

Unit aim

The aim of this unit is to enable learners to develop and use the specialised techniques of a songwriter and to foster the skills needed to bring songs to performance.

Unit abstract

Writing songs is a specialised area within the wider discipline of composition. It does not automatically follow that all composers can write successful songs. Songwriting is an art form that encompasses all periods and styles, having a history that can be traced back centuries. In more serious classical styles, composers such as Franz Schubert and Hugo Wolfe stand supreme in this art form.

Contemporary pop music is very dependent on songs and songwriting, regardless of style or genre (heavy metal, acoustic, bands or solo artists) and has become an important art form in its own right. Purely instrumental pop compositions are in the minority. Furthermore, the singer-songwriter is a popular music phenomenon which does not occur in classical music. The Beatles changed the face of pop music in the 1960s with their fresh approach to the sound and content of their songs – but their resultant influence on music can be attributed as much to Lennon and McCartney writing their own songs as to their performances.

A song is a complete composition in microcosm. The ingredients of a song – flowing, memorable melody lines and lyrics, chord progressions, accompaniment figures – are elements of composition in miniature. On completion of this unit the learners will be able to understand and acquire these skills together with the process of writing songs, working with other musicians in the process.

Learning outcomes

On successful completion of this unit a learner will:

1 Be able to use advanced techniques in relation to the setting of song lyrics

2 Understand advanced techniques in relation to the use of melody, harmony and instrumentation

3 Be able to develop songwriting skills through workshop and rehearsal techniques

4 Be able to compile a showreel of original compositions.

Unit content

1 **Be able to use advanced techniques in relation to the setting of song lyrics**

Lyrics: e.g. word setting using both original words and/or existing text, humour and pathos, prosody and rhyme, literary devices, versification and word setting, musical 'pulse' and word scan, suitable melodic use, melismatic phrasing

Form and structure: e.g. free and established forms, introduction, verse, chorus, instrumental, middle eight and coda, lead sheet layout and structure

2 **Understand advanced techniques in relation to the use of melody, harmony and instrumentation**

Harmony: structures e.g. chord sequences, melodic writing, the 'hook', rhythm, modulation, tonality and chromaticism

Style and instrumentation: e.g. writing in a wide variety of free, established and contemporary art forms, stylistic writing and arrangement for voices with instruments (keyboard/piano, orchestral instruments, 'pop group', jazz ensembles and big band, other free combinations)

3 **Be able to develop songwriting skills through workshop and rehearsal techniques**

Experimentation: e.g. jamming, changing style and structure, using instrumental resources, effective use of techniques and games (cut-ups, rhyming games etc), word play and improvisation, using technology

Inspiration: e.g. literary sources, social commentary, personal experiences, historical sources, analysis of other songwriters' techniques, ballads, love songs, films, incidental music, drama, comedy, books and poems

Songwriters' tools: e.g. lyric books, note books, sketch books, technological tools (hardware sequencers, portable recording equipment, MIDI workstations, DAW etc), rhyming dictionary, auto-accompaniment software, musical games (singing different lyrics to a given melody and vice versa etc)

4 **Be able to compile a showreel of original compositions**

Audience: e.g. audience feedback, showcasing, agents, demo, theme, concept, marketing

Showreel: e.g. personal publicity package, professional implications, Musicians' Union, singer, song delivery, targeting, copyright, publishing

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Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Be able to use advanced techniques in relation to the setting of song lyrics	1.1 produce a portfolio of songs using original and/or devised lyrics in varying styles 1.2 illustrate disciplined control of form and structure in a varied portfolio of songs
LO2 Understand advanced techniques in relation to the use of melody, harmony and instrumentation	2.1 analyse the harmonic structure of a variety of original songs or compositions 2.2 illustrate control of melody, harmony and instrumentation by producing a portfolio of songs or compositions in a variety of styles
LO3 Be able to develop songwriting skills through workshop and rehearsal techniques	3.1 direct successful workshop developments and rehearsals working with musicians to produce original compositions 3.2 present sources of inspiration for songs or compositions 3.3 use songwriting tools effectively
LO4 Be able to compile a showreel of original compositions.	4.1 present original material to a variety of audiences 4.2 make a targeted showreel publicity package with due regard to copyright and other professional implications.

Guidance

Links

This unit links with:

- *Unit 6: Audio Post Production*
- *Unit 8: Band Rehearsal and Performance*
- *Unit 11: Composition in Context*
- *Unit 12: Computer Music Composition and Production*
- *Unit 18: Harmony and Arranging*
- *Unit 19: Harmony and Composition*
- *Unit 20: Improvisation in Music*
- *Unit 21: Keyboard Skills*
- *Unit 28: Music Composition Techniques*
- *Unit 32: Music Performance Skills*
- *Unit 38: New Media Technology*
- *Unit 39: Orchestration*
- *Unit 47: Singing Techniques and Styles*
- *Unit 49: Sound Creation and Manipulation*
- *Unit 52: Studio Recording and Engineering.*

This unit also has links with the following National Occupational Standards:

Music Business (Record Labels)

- IM28 Create music for interactive media products.

Essential requirements

In addition to material generally available, learners must have access to a specialist music library including scores, audio playback equipment and a room with a piano.

Learners will need access to a variety of rehearsal and performance areas and video and recording equipment.

Employer engagement and vocational contexts

External venues and recording studios are desirable, with students forming industrial and music business links. It is essential for learners to experience performance and audience reaction to their songs. Students will need to compile a 'showreel' of their songs on CD or, if possible on, DVD, showing a professional approach to building a career. Agencies and marketing companies can be consulted.

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Unit 49: Sound Creation and Manipulation

Unit code: R/601/1596

Level: 5

Credit value: 15

Unit aim

This unit aims to enable learners to create and manipulate sound in contemporary music production using appropriate technical skills supported by relevant theory.

Unit abstract

Sound creation and manipulation is a central component of modern music production. The introduction of virtual systems has put sound creation technology within reach of all musicians and composers. However, as more individuals have access to music creation, the ability to manipulate sonic content in order to achieve originality has become increasingly important.

The unit is designed to give learners the confidence to create and manipulate sound using a range of different methods and technologies. Learners will develop the practical skills associated with synthesis and sampling technique, supported by relevant theory. They will also develop their skills and creativity in a compositional context and understand the historical developments that have led to modern-day practice.

On completion of this unit learners will understand the relevance of sound creation and manipulation in the context of a wide area of musical disciplines. Emphasis should also be placed on transferable skills in order to give learners confidence with a wide range of platforms and technology. The unit also provides the opportunity to discover sound in non-musical contexts (for example sound design) as well as helping to develop a wider understanding of instrumental timbre and playing techniques. Finally, the content can support understanding of related issues such as the properties of sound, listening skills and copyright regulations.

Learning outcomes

On successful completion of this unit a learner will:

1 Understand the theoretical basis of synthesis and sampling

2 Be able to operate synthesisers

3 Be able to operate samplers

4 Be able to create and manipulate sound in virtual environments.

Unit content

1 **Understand the theoretical basis of synthesis and sampling**

History: landmarks e.g. Fourier, Morse, Edison, Nyquist, Buchla, Moog, Chowning, Ondes Martenot, Theramin, Hammond Organ, Melotron, Akai, Fairlight, Emulator, Yamaha DX7, Musique Concrete, Varese, Stockhausen, Walter Carlos, MIDI, copyright

Types and platforms: types of synthesis e.g. additive, subtractive, FM/AM, wavetable, modelling, vector; platforms e.g. vocoder; software samplers and synthesisers, hardware samplers and synthesisers, multi-timbral instruments, modular synthesisers

Synthesis theory: modules e.g. oscillators, waveforms, envelope generators, LFOs, audio rate modulation, interfaces

Sampling theory: concepts e.g. sample rate, bit rate, aliasing, quantisation, dither, interfaces

2 **Be able to operate synthesisers**

Sound creation: sources e.g. oscillator parameters, frequency range, tuning, noise, layering, musicality, timbre

Sound manipulation: treatments e.g. envelope shaping, dynamic envelope shaping, modulation, sequencing, SFX processing, automation, MIDI controllers, patch creation and storage

Interfaces: MIDI; audio in/out; librarians; game controllers; keyboards; control surfaces; USB; parameter sliders; knobs

3 **Be able to operate samplers**

Sound creation: techniques e.g. sound sources, frequency range, tuning, audio editing, layering, musicality, pitched instruments, non-pitched instruments, velocity layers, key switches

Sound manipulation: treatments e.g. looping, pitch changing, time stretching, envelope shaping, modulation, sequencing, SFX processing, automation, MIDI controllers, patch creation and storage

Interfaces: MIDI; audio in/out; librarians; game controllers; keyboards; control surfaces; USB; parameter sliders; knobs

4 **Be able to create and manipulate sound in virtual environments**

Choosing virtual instruments: context e.g. standalone, modular, sample based, synthesis based, presets, libraries; integrated systems e.g. Logic, VST

Choosing plug-ins: functionality e.g. modulation effects, reverb, EQ, compression, presets

Creating sound: context e.g. originality, authenticity, musicality, suitability

Controlling sound: control e.g. processing, routing, mixing, automation

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Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand the theoretical basis of synthesis and sampling	1.1 explain historical developments in sampling and synthesis 1.2 explain different types of synthesis 1.3 explain the components of synthesis 1.4 analyse sampling in relation to digital audio theory
LO2 Be able to operate synthesisers	2.1 produce a range of sounds using synthesiser components 2.2 design sound using a range of synthesiser components 2.3 control sound in real time using hardware and software interfaces
LO3 Be able to operate samplers	3.1 create copyright-free audio samples 3.2 produce a range of pitched and unpitched timbres 3.3 design complex timbres using velocity layers, key switches, looping and synthesis 3.4 control sound in real time using hardware and software interfaces
LO4 Be able to create and manipulate sound in virtual environments.	4.1 design, store and retrieve original sounds 4.2 create a sound palette that includes samplers and different types of synthesiser 4.3 create composition based upon original presets 4.4 create finished mixes using appropriate SFX and real-time control of sonic parameters.

Guidance

Links

This unit links with:

- *Unit 2: Acoustics*
- *Unit 4: Audio Electronics*
- *Unit 12: Computer Music Composition and Production*
- *Unit 16: Critical Music Listening*
- *Unit 29: Music Electronics and Maintenance*
- *Unit 35: Music Studio Production*
- *Unit 36: Music Technology*
- *Unit 43: Principles of Musical Sound.*

This unit also has links with the following National Occupational Standards:

Technical Theatre

- CPD1 Improving your skills
- CPD2b Ensure that you and your team keep up to date with the technical and production areas of the live arts
- TP5.6 Sourcing sound equipment
- MTP2 Cleaning up own work area

Music Business (Record Labels)

- MB17 Contribute to assessing the impact of emerging technology for the music business
- MP28 Understand copyright and how copyright can be used to generate income in a music business environment.

Essential requirements

The unit is written with the understanding that it can be completed within virtual environments and not be dependent upon hardware technology. This allows learners to gain practical experience with a variety of synthesisers and samplers. For example, most audio/MIDI sequencers now come with a wide range of virtual instruments and plug-ins. However, learners do need access to hardware control interfaces, for example controller keyboards and control surfaces.

It would also help learning if software-based modular systems such as AudioMulch, Plogue Bidule (both are cross-platform and have shareware versions), Synth Edit and Reaktor were available. Other software should include audio-editing applications, sample conversion software and patch librarians.

Finally, the availability of some hardware may be desirable in order to help learners make comparisons between hardware and software systems.

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Employer engagement and vocational contexts

It is important that learners understand the connection between the unit content and its potential to support their career aspirations. The ability to create and manipulate sound has a wide range of vocational outcomes within the music business and relevant connections need to be made in the delivery of the unit. For example, the skills learned can support careers in music composition, sound design, Foley creation, music production etc.

Links with employers are not necessary for the delivery and completion of this unit. However, it would be beneficial for learners to have contact with industry practitioners in areas such as music composition, sound design and studio production in order to understand current practice.

Unit 50: Sound System Maintenance

Unit code: H/601/1618

Level: 5

Credit value: 15

Unit aim

This unit aims to enable learners to maintain and service sound systems by instilling a working knowledge of the principles of operation and the technical components involved.

Unit abstract

Sound systems are increasingly common in venues, offices, arts centres, studios and even shopping centres, sports centres and centres of worship. Their ubiquity also brings with it a wide variety of specifications, solutions and some quite complex and bespoke equipment. This unit looks at being able to understand and troubleshoot problems which may arise with such systems as well as being able to assess the flexibility of systems as the client's needs change.

This unit is relevant to those who wish either to gain employment or to freelance in this area or who wish to set up their own facility in what is a growth area of the music technology industry.

Learners will learn to identify faults and prepare schedules for both preventative and curative maintenance. This will be supported through studying both the use of test equipment and the reading of basic circuit diagrams. Learners will study the synchronisation systems, time-codes and networking protocols used in the sound industry as interfacing with other sources such as video and the internet are crucial.

Learners will develop awareness of the communication skills necessary to work in this area, which will include discussing and providing quotes and estimates for clients and understanding what is required from a sound system when described by someone without the technical knowledge, such as a manager or architect.

Learning outcomes

On successful completion of this unit a learner will:

1 Understand maintenance and safety procedures relevant to the sound industry

2 Be able to test circuits

3 Understand synchronisation systems, interfaces, networks, protocols and time-codes

4 Be able to assess technical problems in order to inform clients of costs and interruption.

Unit content

1 **Understand maintenance and safety procedures relevant to the sound industry**

Maintenance: maintenance schedules; preventative and curative maintenance; reporting procedures

Safety: setting up a maintenance area; power supplies; bench lighting; interconnection leads; electric shock; noise

Procedures: safety checks and checklists; responsibility; safety laws

Practices: returning faulty equipment; spares; stocks monitoring and ordering; keeping stock lists and schedules

2 **Be able to test circuits**

Test equipment: continuity testers; audio function generator; counter timer; RMS voltmeter; general-purpose meter; oscilloscope; spectrum analyser; audio analyser; distortion analyser; analogue and digital test tapes; digital signal analysers; toolkit items; solder station

Circuit: diagram; flowchart; signal tracing; components; fault checks; fault logging; schematics

Connections: sockets; plugs; joints; edge connectors; potentiometers; maintain connections; solder; clean

3 **Understand synchronisation systems, interfaces, networks, protocols and time-codes**

Networks and interfaces: AES/EBU SPDIF; digital recording formats; computer interfaces e.g. SCSI protocol and SMDI, FireWire, USB, i-link; communication interface standards e.g. ISDN and ADSL links; and interfaces; manufacturer-specific protocols e.g. TDIF, ADAT; optical CD ROM standards and platforms; CD-R and DVD mastering

Synchronisation: SMPTE time-code and frame rates; MIDI time-code; synchronisation; synchronous video sync; wordclock reference and synchronisation references

Audio and video systems: audio and video compression systems; MP3; MPEG standards; Dolby standards; convergence of audio, video and MIDI; peer-to-peer networks; internet applications, protocols and procedures

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4 **Be able to assess technical problems in order to inform clients of costs and interruption**

Trace faults: identifying faults through listening; logical fault analysis and signal tracing; test sets; test signals

Costs: capital cost of equipment and the cost of component replacement; maintenance as an investment rather than a cost

Client: the implication of interruption to the client in financial and artistic terms; the importance of good communications with the client, colleagues, suppliers and manufacturers

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand maintenance and safety procedures relevant to the sound industry	1.1 specify routine curative and preventative maintenance and fault reporting procedures 1.2 analyse safety regulations to ensure adequate safety checks and procedures 1.3 evaluate repair and maintenance practices 1.4 assess requirements of a safe and effective maintenance area
LO2 Be able to test circuits	2.1 use a variety of relevant test equipment 2.2 analyse circuit diagrams and workshop manuals 2.3 isolate faults and repair where possible 2.4 repair and clean connections and interfaces
LO3 Understand synchronisation systems, interfaces, networks, protocols and time-codes	3.1 explain analogue and digital interfaces and networks 3.2 explain the technological challenges associated with synchronisation and time-code frame rates 3.3 evaluate formats, protocols and procedures involved in audio/video systems
LO4 Be able to assess technical problems in order to inform clients of costs and interruption.	4.1 logically trace faults and signals 4.2 be aware of the cost implications of breakdowns and component replacement 4.3 show good communication with clients.

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Guidance

Links

This unit links with:

- *Unit 2: Acoustics*
- *Unit 4: Audio Electronics*
- *Unit 5: Audio Mastering and Manufacture*
- *Unit 29: Music Electronics and Maintenance*
- *Unit 35: Music Studio Production*
- *Unit 51: Studio and Facilities Management.*

This unit also has links with the following National Occupational Standards:

Technical Theatre

- CPD1 Improving your skills
- CPD2b Ensure that you and your team keep up to date with the technical and production areas of the live arts
- TP3.6a Contribute to the planning of sound requirements for a production
- HS1 Working safely
- TP8.4 Setting up and checking sound equipment
- TP5.6 Sourcing sound equipment
- TP9.4a Rehearsing sound

Live Events and Promotion

- LE7 Identify suppliers of materials and equipment for the running of a live event.

Essential requirements

Learners must experience of a variety of performance spaces and recording facilities in which to carry out maintenance practice. A good range of test equipment must be made available, including signal generators and oscilloscopes, frequency spectrum analysers, circuit testing equipment, test tapes, voltage meters, and audio and distortion analysers.

Learners must have access to a well-equipped maintenance test bench with adequate power supplies, solder and de-solder stations and an appropriate range of interconnection leads. Centres must also consider computer software-based and simulated alternatives to the above, where appropriate.

Employer engagement and vocational contexts

Although this unit explores the fundamental principles of maintenance and service, it is essential that it remains relevant, approachable and practical. There should be scope for learners to explore issues through their own research and to contribute their ideas and develop their reasoning skills. However, there is a strong link to ubiquitous work situations that may arise and offer fruitful contexts for learning. Working with local radio, TV, ISP, podcasting, community radio, web TV etc may lead to viable work contexts and opportunities for both parties.

It is important that this unit is taught by someone with practical experience in the field and that they are able to pass on their experience to learners. Centres should make every effort to ensure that learners have the opportunity for discussion with professionals, preferably in the workplace.

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Unit 51: Studio and Facilities Management

Unit code: H/601/1585

Level: 4

Credit value: 15

Unit aim

The aim of the unit is to enable learners to be able to operate a small studio facility as a business for clients.

Unit abstract

Recording, rehearsing, supporting and servicing have always been and will continue to be key to the music industry. In an increasingly competitive world it is the well-run, knowledgeable and conscientious organisation, which offers excellent value for money, that will survive and thrive.

As the music, rehearsal and recording facilities marketplace develops, learners will need to be aware of the continuing need to develop and react to clients' needs. Learners must be able to consider how space and equipment are needed by the industry and that facilities which provide solutions and services must maintain a positive relationship with clients.

This unit is relevant to those who wish either to gain employment or to freelance in this area or who wish to set up their own facility. It looks at the business processes required and also the management and some of the technical requirements. This includes the use of electrical equipment and the safety aspects that are required. It will explore the day-to-day operation skills and also the key processes which make a good facilities business.

Learners will be made aware of the entrepreneurial opportunities within the studio facilities services and gain a knowledge of the skills required to succeed in this field. Learners will also develop awareness of the communication skills necessary to work in this area where prices are discussed and negotiations made face to face.

Learning outcomes

On successful completion of this unit a learner will:

1 Understand business practices involved in studio and facilities management

2 Understand the day-to-day processes involved in studio and facilities management

3 Understand the technical elements of studio operation

4 Be able to set up and run studio sessions.

Unit content

1 **Understand business practices involved in studio and facilities management**

Business planning: business plan; funding; buying equipment; forecasting; budgets; premises; studio design matters

Financial management: expenses and rates; cash flow, invoices and bookkeeping; bidding on projects; personnel; contracts; tax issues including VAT; accounting procedures; asset tracking; invoicing; insurance

Marketing: advertising; networking; client database; market positioning and price point; website; record companies; producers

2 **Understand the day-to-day processes involved in studio and facilities management**

Scheduling: booking sessions; downtime; hourly rates; block rates; contracting staff; timesheets; diary; lock-outs; maintenance contracts

Handling and storing equipment and resources: security; alarms and security procedures; insurance; labelling systems; data storage; hard disks and removable media; instrument storage; temperature; porterage; electrical safety e.g. PAT testing, artists' portable electrical equipment

Developing business: demos; album projects; audio for video and voice-over; mastering; audio books; radio and television; multimedia; format transfer

3 **Understand the technical elements of studio operation**

Maintenance: front-line maintenance; preventative maintenance; line-up; cleaning; cable care; soldering; connectors; wiring conventions; patchbays; contacts; computer maintenance

Patch, sound and file libraries: sample libraries; synthesiser sounds; computer files; digital audio files and formats; library systems; computer-based library systems; outboard patch libraries; back-up responsibilities

Fault finding: noise; distortion; analogue interfacing; digital interfacing; intermittent problems; grounding; ground loops; monitors; computer problems; synchronisation

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4 **Be able to set up and run studio sessions**

Artist requirements: liaison; communication; equipment hire; pre-production; equipment compatibility; instruments; amplifiers; musical requirements; style; contracting session players; working with producers

Studio preparation: engineers; session documentation; setting up microphones; talkback; foldback; studio layout; connecting equipment; testing equipment; health and safety

Running sessions: tracklaying; overdubbing; mixing; mastering; duplication; documentation; diplomacy; storage of artists' material

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand business practices involved in studio and facilities management	1.1 explain the business planning procedures involved in setting up and running studio facilities 1.2 explain the financial management of the studio and related facilities 1.3 analyse approaches to marketing for studio and related facilities
LO2 Understand the day-to-day processes involved in studio and facilities management	2.1 evaluate procedures for scheduling in the professional studio and facilities environment 2.2 implement standards and procedures for handling and storing resources 2.3 explain strategies for developing the facilities business 2.4 explain legal procedures for electrical safety and the use of client's equipment on site
LO3 Understand the technical elements of studio operation	3.1 explain maintenance techniques in the studio environment 3.2 explain how patch, sound and file libraries are managed within the studio 3.3 evaluate fault-finding procedures for studio/audio systems
LO4 Be able to set up and run studio sessions.	4.1 manage artist requirements during the recording process 4.2 prepare studios or facilities prior to sessions 4.3 manage studio or facility sessions.

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Guidance

Links

This unit links with:

- *Unit 14: Creative Arts Professional Practice*
- *Unit 26: Marketing the Creative Arts*
- *Unit 27: The Music Business in the 21st Century*
- *Unit 35: Music Studio Production*
- *Unit 42: Preparation, Process and Production in the Creative Arts*
- *Unit 52: Studio Recording and Engineering.*

This unit also has links with the following National Occupational Standards:

Technical Theatre

- CPD1 Improving your skills
- CPD2b Ensure that you and your team keep up to date with the technical and production areas of the live arts
- HS1 Working safely
- TP8.4 Setting up and checking sound equipment
- TP5.6 Sourcing sound equipment

Cultural Venue Operations

- CV7 Contribute to the ongoing care of cultural venue premises
- CV11 Handle, package and transport items to new locations
- CV13 Move items within cultural venue premises
- CV14 Monitor the security and environment of items within a cultural venue
- CV24 Control the security of a cultural venue.

Essential requirements

Learners will require access to a studio facility of appropriate quality and the opportunity to set up and experiment with systems for the practical management of such a facility.

Learners must be given the opportunity to practise front-line maintenance procedures on a range of audio equipment and systems, including computer-based systems.

Employer engagement and vocational contexts

Research into professional practice in this area could benefit from input from visiting speakers, a range of case studies and/or visits to appropriate facilities. Where necessary, access to IT-based systems for studio management and related activities should be available.

Much of the delivery for this unit should be studio based, although many concepts and topics can be dealt with through lectures and seminars. Working closely with local facilities providers is crucial for the relevance of this material.

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Unit 52: Studio Recording and Engineering

Unit code: K/601/1538

Level: 4

Credit value: 15

Unit aim

This unit aims to enable learners to develop theoretical and practical knowledge of studio recording, including factors affecting audio quality, equipment and effective planning of recording sessions.

Unit abstract

Whether taking up the art of studio engineering as a career or not, it is worth any musician who may participate in a recording at some point having knowledge and an appreciation of the way in which a studio recording session is organised. Being able to talk the same 'language' as the engineer and producer could help in getting the best possible results from the session. This can be from a variety of points of view.

First, a musician should have an understanding of how the studio works on a technical level, comparing the use of different processes, techniques and equipment such as microphones. The use of different audio effects can enhance the final production, whether used correctively or creatively. It can also be from the viewpoint of how a studio session is organised and run, and what the musician can do in terms of effective preparation for any recording. All of this applies to anyone using current digital recording as much as to someone building up their songwriting on a basic four-track.

Learning outcomes 1 and 2 look at factors affecting audio quality, together with the two recording methods of using microphones and direction injection (DI). Learning outcomes 3 and 4 look at the use of the mixing desk, including such things as routing and use of EQ, and the creative and corrective treatment of sound. Finally, the unit will look at effective studio session preparation, both from the point of view of the musician and from that of the studio personnel.

Learning outcomes

On successful completion of this unit a learner will:

1 Be able to rectify factors affecting audio quality

2 Understand and use essential studio equipment

3 Be able to implement the treatment of sound creatively and correctively

4 Be able to demonstrate effective recording studio session organisation.

Unit content

1 **Be able to rectify factors affecting audio quality**

Distortion: issues e.g. frequency response, amplitude response, linearity, clipping, intermodulation distortion, transient response, phase cancellation, gain staging, summation

Monitoring/metering: options e.g. monitor types, headphones, control room acoustics, meter types, judging sound quality, safety

Microphone type and choices: options e.g. operating principles, sensitivity, frequency response, polar pattern, instrumental characteristics, stereo recording, placement, ambience, separation, coloration, accessories

Line level sources: issues e.g. line level standards, impedance matching, direct injection, amplification

2 **Understand and use essential studio equipment**

Recording formats: features e.g. tape or hard disk-based digital formats, bit rates, editing, storage, analogue recording systems

The mixing desk: features e.g. mixing-desk types, mixing-desk topography, patchbays

Use of mixing desks: functions e.g. routing, sub-grouping, use of internal/external effects, mic/line inputs, monitoring, automation

3 **Be able to implement the treatment of sound creatively and correctively**

Compression: functions e.g. types of compressor, corrective compression, creative compression, limiting, expansion, using the side chain

Noise gates: functions e.g. types of noise gate, corrective gating, creative gating, ducking, using the side chain

Equalisation: uses e.g. types of equalisation, corrective equalisation, creative equalisation, filters

Use of effects: contexts e.g. delay-based effects, tempo, width, depth, reverberation, enhancers, hardware, plug-ins

4 **Be able to demonstrate effective recording studio session organisation**

Pre-production: planning e.g. rehearsal and arrangement, demos, instrumentation

Session planning: efficiency e.g. session aims, schedule and timescale, resources, accommodation, equipment, track plan

Session arrangements: details e.g. live recording, multi-tracking, overdubs, sound balance, effective monitoring, session logging, track sheets

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Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Be able to rectify factors affecting audio quality	1.1 analyse the causes of and solutions to distortion 1.2 apply effective monitoring in different situations 1.3 apply the use of different microphones for a range of applications 1.4 demonstrate different line level recording techniques
LO2 Understand and use essential studio equipment	2.1 analyse and evaluate previous and current recording formats 2.2 analyse and evaluate the development and use of different mixing desks for recording 2.3 demonstrate a variety of different functions of the mixing desk in a recording studio
LO3 Be able to implement the treatment of sound creatively and correctively	3.1 demonstrate effective techniques for the use of both creative and corrective compression within a range of recording scenarios 3.2 apply effective techniques for the use of both creative and corrective noise gating within a range of recording scenarios 3.3 apply effective techniques for the use of both creative and corrective equalisation within a range of recording scenarios 3.4 demonstrate the use of different types of reverberation and delay-based effects within a range of recording scenarios
LO4 Be able to demonstrate effective recording studio session organisation.	4.1 develop and define a structured pre-recording plan 4.2 apply effective organisational skills in a range of recording sessions 4.3 evaluate different pre-production and recording session organisation planning strategies.

Guidance

Links

This unit links with:

- *Unit 2: Acoustics*
- *Unit 3: Applied Music Production Techniques*
- *Unit 5: Audio Mastering and Manufacture*
- *Unit 6: Audio Post Production*
- *Unit 10: Composing for Film and Television*
- *Unit 23: Live Sound for Small Venues*
- *Unit 24: Live Sound Systems Specification and Operation*
- *Unit 34: Music Production Analysis*
- *Unit 35: Music Studio Production*
- *Unit 43: Principles of Musical Sound*
- *Unit 49: Sound Creation and Manipulation.*

This unit also has links with the following National Occupational Standards:

Technical Theatre

- CPD1 Improving your skills
- CPD2b Ensure that you and your team keep up to date with the technical and production areas of the live arts
- HS1 Working safely
- CPD4a Contributing to technical production work for performance
- CPD4b Overseeing technical production work for performance
- HS2 Assessing risks (HSS6)
- HS5 Controlling risks (ENTO HSS2)
- HS3b Selecting and using safe systems for working at height (RC3)
- TP3.6a Contribute to the planning of sound requirements for a production (C2)
- TP3.6b Planning sound requirements for a production (C2)
- TP8.4 Setting up and checking sound equipment (C6)
- TP14.1a Getting in, fitting up and getting out (M4)
- TP20.4b Supervising sound operation for a live performance in the theatre
- TP23.1 Maintaining buildings or equipment (C12)
- TP5.6 Sourcing sound equipment
- MTP2 Cleaning up own work area.

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Essential requirements

Successful portfolio building will require access to comprehensively equipped studio environments, including a sound recording area and a wide range of microphones and signal processing equipment.

Computer-based resources must reflect current practice. Learners will require access to up-to-date technology appropriate to their individual interests and musical direction. Resources must be available to develop suitable sample and synthesiser libraries.

Employer engagement and vocational contexts

Learners should be encouraged to find out about the recording facilities in the local area and to visit those studios. Where possible, learners will benefit from any session observation or work experience that could be gained. The opportunity to speak to studio personnel, either in the studio or within your own learning facilities, would also be of value.

Unit 53: Work-based Experience

Unit code: D/601/0998

Level: 5

Credit value: 15

Unit aim

This unit aims to enable learners to experience the scope and depth of learning which may take place in a work-based context by planning, monitoring and evaluating the work experience.

Unit abstract

A significant amount of learning can be achieved by carrying out practical activities in a workplace. Learning may be enhanced by taking a more formal approach to work-based activities – by planning, carrying out the activities and reflecting on the benefits of the activities to the business and to the learner.

This unit is designed to allow flexibility of study for part-time and full-time students. It is expected that learners are supervised in the workplace as well as by their academic supervisor.

Learners will have the opportunity, supported by their supervisors, to negotiate and perform activities which will allow them to fulfil the assessment criteria for this unit. They will recognise the scope of what they have achieved by recording evidence from carrying out the activities. They will also gain maximum benefit by reflection on and evaluation of the work they undertake.

Learning outcomes

On successful completion of this unit a learner will:

1 Be able to negotiate industry experience

2 Understand the specific requirements of the placement

3 Be able to undertake work experience as identified

4 Be able to monitor and evaluate own performance and learning.

Unit content

1 **Be able to negotiate industry experience**

Suitable organisation and location: types of establishments for placement e.g. industry-related work for a client brief at college, existing work environment, different department within current employer's business

Negotiation: methods of contacting organisations; methods of undertaking negotiations

Nature of duties: type of undertaking e.g. routine duties and tasks, project work, development of new procedures/protocol

Supervisors: roles and responsibilities of academic and industrial mentors

Expectations of learning: aims e.g. proficiency in new tasks and procedures, time-management and problem solving skills, reflection, discuss progress with others, teamwork

Business constraints: consideration of possible limitations e.g. need to be fully trained, adherence to quality systems, health and safety considerations, supervision time, workload, customer satisfaction, limited staffing, cost of materials

2 **Understand the specific requirements of the placement**

Tasks: details of activities e.g. specific hourly, daily, weekly routine and non-routine tasks; breakdown of a project into stages; new procedures/protocol

Prioritise: reasons for rationalisation of the order of tasks; methods of prioritising work

Plan for the work experience: methods used to develop detailed plan with schedule of tasks, proposed dates for reviews, expected input from supervisors

Benefits to organisation and learner: advantages to business e.g. allowing more routine tasks to be carried out, allowing procedures/techniques to be developed, increasing responsiveness, identifying cost saving measures; advantages to learner e.g. understanding how a business operates, understanding importance of teamwork, learning new techniques, development of problem-solving and time-management skills

3 **Be able to undertake work experience as identified**

Carry out the planned activities: realisation e.g. carrying out tasks and project work according to relevant legislation, training and codes of practice; developing new procedures or protocol

Record activities in the appropriate manner: systematic and appropriate recording of relevant activities e.g. logbook, diary, portfolio, spreadsheets, databases; list of resources

Revise the initial plan as required: methods used to review activities at the appropriate time to see if they meet requirements, make alterations as needed

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4 **Be able to monitor and evaluate own performance and learning**

Evaluation of the quality of the work undertaken: meeting industry standards and evaluating own performance against original proposal; comments/testimony from supervisors

Account of learning during the work experience: details of experience gained e.g. new procedures, interpersonal skills, time-management, problem-solving, teamwork; details of evidence e.g. portfolio of evidence, scientific report, management report

Recommendations on how the learning experience could have been enhanced: alternative ideas e.g. different location, different brief, different time period, more/less support, better time-management, better preparation

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Be able to negotiate industry experience	1.1 research and evaluate suitable organisations that could provide industry experience 1.2 negotiate with work and academic supervisors a proposal for the work experience 1.3 recognise the business constraints on the work experience offered
LO2 Understand the specific requirements of the placement	2.1 agree and prioritise the tasks and responsibilities involved in the work experience 2.2 produce a plan for the work experience 2.3 analyse the benefits of the proposed activities to the business and the learner
LO3 Be able to undertake work experience as identified	3.1 fulfil specified requirements of placement conforming to all related codes of practice 3.2 produce systematic records of work undertaken 3.3 revise the initial plan as required 3.4 make suggestions for improvement and review these with appropriate supervisor
LO4 Be able to monitor and evaluate own performance and learning.	4.1 monitor progress against original proposal 4.2 evaluate the quality of own performance. 4.3 analyse the learning which has taken place during the work experience using suitable reflections 4.4 make recommendations on how the experience could have been enhanced.

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Guidance

Links

This unit links with:

- *Unit 17: Employability Skills*
- *Unit 40: Personal and Professional Development.*

This unit also has links with the following National Occupational Standards:

Management

- A1 Manage your own resources
- D1 Develop productive working relationships with colleagues
- E8 Manage physical resources
- F1 Manage a project.

Essential requirements

Given the work-based nature of this unit, the majority of resources will be those available to the learner in the workplace. The work will normally be planned to be achievable within the resource constraints of the employer. Therefore, knowledge of company structures and daily routines and expectations is essential. Learners should also have access to a wide range of research facilities including careers library and/or careers services.

Tutor support and guidance are essential. Learners should remain in touch with tutors during the work-experience – email is often the best way but some colleges may have access to a virtual learning environment where learners can share information and experiences with each other and the tutor.

Unit 54: World Music Composition and Performance

Unit code: T/601/1591

Level: 5

Credit value: 15

Unit aim

This unit aims to enable learners to examine the key musical features of a culture from another part of the world and to compose and perform original work that integrates these elements.

Unit abstract

The globalisation and shrinking distances of our world are increasingly bringing arts from other cultures to our attention. Music from around the world, and little known music from our own, is now mainstream and it is a rich resource of material, ideas and invention. The analysis of styles of music outside the student's own culture and subsequent incorporation of these elements into new compositions offers numerous opportunities to the performing musician.

As well as providing a valuable experience in musical analysis of unfamiliar styles and an understanding of the demands placed upon the original composers and performers, it gives learners the chance to supply their own briefs for new works, aimed at performance – whether intended for live ensemble, recording or some other form of technology.

As contextual issues are major factors in the evolution of music, learners should be able to differentiate between the elements that have historical tradition and those which perhaps have been introduced, or which have been altered over a period of time. The investigation of the elements that have brought this about will involve aspects of research.

The nature of the new composition could range from faithful adherence to the principles which guided the music of the selected area of study, to incorporation of identified elements into new, hybridised pieces, thus extending the students' armoury of exploitable musical elements, enhancing career opportunities in performance and composition.

Learning outcomes

On successful completion of this unit a learner will:

1 Understand how the core musical elements of a selected culture are used

2 Understand the traditional and contemporary elements within the selected genre and the factors that have influenced it

3 Be able to integrate identified elements into new compositions

4 Be able to realise new compositions through live performance, recording or technology.

Unit content

1 **Understand how the core musical elements of a selected culture are used**

Musical elements: e.g. rhythms, harmonic structures, melody; instrumentation e.g. solo, ensemble performance, arrangement and structures, tempo; key elements e.g. call-and-response, scales, modes, phrasing, stylings, performance and instrumental techniques

2 **Understand the traditional and contemporary elements within the selected genre and the factors that have influenced it**

Traditional elements: traditional instruments; musical purpose e.g. dance, religion, ritual; indigenous culture; range of styles e.g. vocal, instrumental, ensembles, structure, arrangement

Contemporary elements: evolution and change; complexity; changes e.g. instrumentation, tempo, rhythm, melody, structure, purpose; technology; audience; surviving elements; imported elements

Influencing factors: contextual issues e.g. social, political, geographic, religious; other cultures; recording industry and music business; market; international interest; cultural change

3 **Be able to integrate identified elements into new compositions**

Identified elements: elements of musical structure e.g. melody, rhythm, structure, progressions, harmony, scale, mode; performance elements e.g. technique, ornamentation, instrumentation, improvisation and variation

Integration: intention; experimentation; voicings; instrumentation; arrangement; tempo and rhythm; hybrid forms; adapted and original elements; blend; incorporation; structures; stereotypes; demos; notation

4 **Be able to realise new compositions through live performance, recording or technology**

Performance: types e.g. ensemble, solo, recording, music technology; resources e.g. chord charts, notation, tab, demos; musical direction; practice and rehearsal; preparation time; deadlines; discipline; realisation and presentation

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Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand how the core musical elements of a selected culture are used	1.1 explain core musical elements of selected area of study 1.2 explain the instruments used 1.3 explain performance techniques typical of genres
LO2 Understand the traditional and contemporary elements within the selected genre and the factors that have influenced it	2.1 analyse the traditional or indigenous musical elements in the selected area of study 2.2 analyse contemporary styles of composition and performance 2.3 explain the influencing factors on the evolution of selected genres
LO3 Be able to integrate identified elements into new compositions	3.1 analyse how identified aspects of selected area of study have been applied to new compositions 3.2 integrate identified elements of genre into new composition through demo version and/or notation
LO4 Be able to realise new compositions through live performance, recording or technology.	4.1 plan the realisation of new compositions in terms of resources and time 4.2 prepare through rehearsal and practice 4.3 present original music through performance, recording or technology.

Guidance

Links

This unit links with:

- *Unit 7: Aural Perception*
- *Unit 8: Band Rehearsal and Performance*
- *Unit 10: Composing for Film and Television*
- *Unit 11: Composition in Context*
- *Unit 18: Harmony and Arranging*
- *Unit 19: Harmony and Composition*
- *Unit 20: Improvisation in Music*
- *Unit 31: Music Notation*
- *Unit 32: Music Performance Skills*
- *Unit 33: Music Performance Studies*
- *Unit 36: Music Technology*
- *Unit 39: Orchestration*
- *Unit 42: Preparation, Process and Production in the Creative Arts*
- *Unit 47: Singing Techniques and Styles*
- *Unit 52: Studio Recording and Engineering*
- *Unit 55: World Music Studies.*

This unit also has links with the following National Occupational Standards:

Music Business (Record Labels)

- IM28 Create music for interactive media products.

Essential requirements

A comprehensive source of recorded examples of world styles is essential, although this could be confined to a number of key areas (the music of which the delivery team considers to be substantial enough to meet the outcomes of the unit). Library resources covering elements of contextual influence and details of the music itself should support these areas of study.

Access to music technology and notational software is recommended during the experimentation/composing/demo stage, plus rehearsal, practice and performance spaces. If learners choose to record their compositions, recording technology and studios would be required.

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Employer engagement and vocational contexts

Many world music artists regularly tour within the UK, and often, particularly at local arts centre level, conduct workshops prior to performance. Learners should be made aware of the local opportunities for exposure to live music while studying this unit.

Unit 55: World Music Studies

Unit code: K/601/1586

Level: 4

Credit value: 15

Unit aim

The aim of this unit is to enable learners to investigate the music of a selected world region (other than the learner's own culture) and to experience the musical ingredients and the contextual factors that have influenced it.

Unit abstract

'World music' as a collective genre has become a major area of interest, to both audiences and the music business itself. The influences of other cultures can be found in many forms of contemporary music, creating new hybrids and collaborations.

The study of the styles of music – the rhythms, harmonic and melodic structure, instrumentation, arrangement – is intended to extend the range of possibilities open to the working musician. This broadened knowledge can be of benefit in terms of music creation, whether that be exploring new avenues of creative performance or other applications (such as composing for visuals, for example).

However, no such study would be complete without an examination of the contextual issues that have made this music what it is. These can be broad ranging, but could include factors such as colonialism, diaspora, historical, cultural, social and religious influences, geography, politics, economics etc and will vary from region to region.

Learners are encouraged to select an area of study after exposure to a range of possibilities and following negotiation with their tutor (to ensure equity among selected specialisms) and – on completion of the unit – provide both musical analysis and explanation of the contextual factors that have had an influence on this music.

Learning outcomes

On successful completion of this unit a learner will:

1 Understand the musical elements of the selected genre using correct terminology

2 Understand how instrumentation, arrangement and performance characteristics are used within the selected genre

3 Understand how contextual factors have influenced the development of the selected genre

4 Be able to present findings in a negotiated format using selected examples.

Unit content

1 **Understand the musical elements of the selected genre using correct terminology**

Musical elements: rhythmic e.g. tempos, time signatures, simplicity/complexity, polyrhythms, grooves, rhythmic interplay between instruments; melodic e.g. scales, modes, ranges, call-and-response, repetition, improvisation, phrases, motifs; harmonic e.g. chords and structures, relationship to other content (melody/bass), complexity, drones, suspensions, extended chords, dissonance

Terminology: use of musical language; explanation of terms specific to the culture/language of genre

2 **Understand how instrumentation, arrangement and performance characteristics are used within the selected genre**

Instrumentation: specific instruments and their family groups; Hornbostel-Sachs classification; sections; tunings; combinations; typical ensembles; developments and variations; historical and modern comparisons

Arrangement: structure; complexity; dynamics; how instruments are employed; influences from other cultures; range and depth, development

Performance characteristics: improvisation; discipline; virtuosity; specific instrumental technique e.g. vibrato, ornamentation; historical development; how skills are acquired e.g. training, education, aural traditions

3 **Understand how contextual factors have influenced the development of the selected genre**

Context: factors e.g. colonialism, occupation, invasion, diaspora, historical, geographical, cultural, social, religion, other art forms (e.g. music developed from accompanying other media), purpose (e.g. dance, meditation, story telling), geographical, political, suppression and rebellion

4 **Be able to present findings in a negotiated format using selected examples**

Negotiated format: methods e.g. essays, radio/recorded format, presentations, audio-visual, portfolio, internet/webpage, workshop, seminar

Selected work: types e.g. recordings, music technology, notation, demonstration, performance, film

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Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand the musical elements of the selected genre using correct terminology	1.1 analyse the musical content of the negotiated musical genre 1.2 analyse musical elements using language appropriate to the analysis of music
LO2 Understand how instrumentation, arrangement and performance characteristics are used within the selected genre	2.1 explain instruments employed within selected genre 2.2 analyse the composition of typical ensembles within the genre 2.3 explain how arrangements are used in the selected study area 2.4 analyse the performance techniques employed within the selected music
LO3 Understand how contextual factors have influenced the development of the selected genre	3.1 justify the contextual elements which have had an influence in shaping the music of the selected region 3.2 analyse the indigenous music of the study area 3.3 explain the musical changes brought about by contextual influences
LO4 Be able to present findings in a negotiated format using selected examples.	4.1 propose a suitable format in which to present work 4.2 use examples to support evidence 4.3 present work in selected format.

Guidance

Links

This unit links with:

- *Unit 7: Aural Perception*
- *Unit 8: Band Rehearsal and Performance*
- *Unit 10: Composing for Film and Television*
- *Unit 11: Composition in Context*
- *Unit 18: Harmony and Arranging*
- *Unit 19: Harmony and Composition*
- *Unit 20: Improvisation in Music*
- *Unit 31: Music Notation*
- *Unit 32: Music Performance Skills*
- *Unit 33: Music Performance Studies*
- *Unit 36: Music Technology*
- *Unit 39: Orchestration*
- *Unit 42: Preparation, Process and Production in the Creative Arts*
- *Unit 48: Songwriting Techniques and Skills*
- *Unit 52: Studio Recording and Engineering*
- *Unit 54: World Music Composition and Performance.*

This unit also has links with the following National Occupational Standards:

Music Business (Record Labels)

- IM28 Create music for interactive media products.

Essential requirements

Learners need access to a broad library of recorded musical examples from a range of world regions. Contextual elements will require the supply of relevant library resources, although it is understood that the nature of the subject area may mean coverage will have restrictions.

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