

## Higher National Unit Specification

### General information for centres

**Unit title:** Radio: Technical Operations, Recording and Editing

**Unit code:** DM1C 34

**Unit purpose:** This unit is designed to enable candidates to acquire the skills and knowledge necessary to prepare and operate a radio studio and record single and multitrack recordings.

On completion of the unit the candidate should be able to:

- 1 Prepare radio studios for a recording or broadcast.
- 2 Operate studio equipment to facilitate recording and editing.
- 3 Record and edit interviews to computer file using digital audio software.
- 4 Record and edit short multitrack productions to computer file using digital audio software.

**Credit points and level:** 2 HN Credits at SCQF level 7: (16 SCQF credit points at SCQF level 7\*)

*\*SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.*

**Recommended prior knowledge and skills:** Access to this Unit is at the discretion of the Centre. However, it is recommended that candidates should have some prior knowledge and skills in hospital radio or have successfully completed NC media units, e.g. Radio: Making a programme 1 and 2.

**Core skills:** There may be opportunities to gather evidence towards core skills in this Unit, although there is no automatic certification of core skills or core skills components.

**Context for delivery:** This unit is included in the framework of the group award for HNC Creative Industries: Radio Broadcasting, and involves developing the basic technical skills and knowledge required of broadcasters in a modern multi-skilled radio industry. It is recommended that the Unit should be taught and assessed within the context of that particular award. There are opportunities for parts of the Unit to be delivered in tandem with Radio Interviewing and/or Radio Presentation.

## General information for centres (cont)

**Assessment:** It is recommended that the assessments for the Outcomes are linked, as follows:

- ◆ Outcome 1, which requires the candidate to prepare radio studios for a recording or broadcast  
and
- ◆ Outcome 2, which requires the operation of basic studio equipment, can be assessed with outcome 3 to record a studio based interview for assessment

Centres should note that Outcome 3 requires a recorded interview to be dubbed to computer file. Outcome 4 requires the candidate to record and edit short multitrack productions to computer file using digital audio software.

## **Higher National Unit specification: statement of standards**

**Unit title:** Radio: Technical Operations, Recording and Editing

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The sections of the Unit stating the Outcomes, knowledge and/or skills, and evidence requirements are mandatory.

Where evidence for Outcomes is assessed on a sample basis, the whole of the content listed in the knowledge and/or skills section must be taught and available for assessment. Candidates should not know in advance the items on which they will be assessed and different items should be sampled on each assessment occasion.

### **Outcome 1**

Prepare radio studios for a recording or broadcast

#### **Knowledge and/or skills**

- ◆ Knowledge of technical capabilities of various microphones
- ◆ How to locate microphones appropriately to facilitate recording
- ◆ How to perform acoustic checks on studio equipment
- ◆ How to carry out general operational checks for broadcast readiness
- ◆ Knowledge of health and safety legislation and requirements in the context of radio technical operations

#### **Evidence requirements**

Candidates will need evidence to demonstrate their knowledge and/or skills by showing that they can:

- ◆ select and position correctly the appropriate microphones for presenter and guest(s)
- ◆ perform acoustic checks efficiently
- ◆ carry out general operational checks
- ◆ maintain safety standards for broadcast

Candidates must be able to set up the studio environment ready for broadcast, e.g. red light on, microphones positioned correctly, and no chuffed or trailing cables evident.

An assessor's checklist must be used to record all the required assessment information.

#### **Assessment guidelines**

This outcome can be assessed along with outcome 2 and it is recommended that the studio be set up in such a way that the candidate has to make adjustments to achieve an efficient setting of operational equipment.

## **Higher National Unit specification: statement of standards (cont)**

**Unit title:** Radio: Technical Operations, Recording and Editing

### **Outcome 2**

Operate studio equipment to facilitate recording and editing

#### **Knowledge and/or skills**

- ◆ How to check volume levels on all sources
- ◆ Use and operation of studio equipment
- ◆ Use and operation of mixing desk
- ◆ Knowledge of health and safety requirements
- ◆ How to ensure that studio discipline is maintained whilst recording is taking place

#### **Evidence requirements**

Candidates will need evidence to demonstrate their knowledge and/or skills by showing that they can:

- ◆ record material, incorporating pre-fade, studio talkback, tonal adjustments and level adjustments
- ◆ maintain studio discipline throughout “on air” recording
- ◆ operate equipment within health and safety guidelines

An assessor’s checklist must be used to record all the required assessment information.

#### **Assessment guidelines**

It is recommended that the assessment of this Outcome is linked to that of Outcome 1, where the candidate will prepare the studio for use and then operate studio equipment whilst recording and editing material.

Candidates must retain their recorded material for assessment purposes.

### **Outcome 3**

Record and edit interviews to computer file using digital audio software

#### **Knowledge and/or skills**

- ◆ Record a studio based interview
- ◆ Dub a recorded interview
- ◆ Edit interviews
- ◆ Label, save and store files

## **Higher National Unit specification: statement of standards (cont)**

**Unit title:** Radio: Technical Operations, Recording and Editing

### **Evidence requirements**

Candidates will need evidence to demonstrate their knowledge and/or skills by showing that they can:

- ◆ record a studio based interview, incorporating appropriate editing, and save to computer file
- ◆ record a location interview incorporating appropriate editing, and save to computer file
- ◆ operate all studio equipment to facilitate recording

Each interview must be recorded to broadcast standards and be at least three minutes long after editing.

An assessor's checklist must be used to record all the required assessment information.

Candidates should retain the completed audio files for inclusion in the portfolio of evidence for the unit.

### **Assessment guidelines**

The candidate will need time to learn how to use digital audio software for recording and editing purposes. It is recommended that they undertake "practice recording and editing sessions" to build up confidence before undertaking the assessments. Interviews must be competently edited, i.e. all out takes are cleanly silenced and the remaining material is structured /re-structured to meet programme requirements. A competent recording means that a healthy signal without distortion is saved to a computer file and is capable of replay without error.

The dubbing of the recorded interview to computer can be done in a non studio location in which case the candidate will be required to operate the virtual mixer.

## **Outcome 4**

Record and edit short multitrack productions to computer file using digital audio software

### **Knowledge and/or skills**

- ◆ How to record voice tracks, music and/or sound effect tracks
- ◆ Knowledge of editing processes
- ◆ How to synchronise tracks whilst recording
- ◆ How to balance levels of tracks
- ◆ How to carry out mixing down process to single wave
- ◆ How to save and label tracks appropriately

## Higher National Unit specification: statement of standards (cont)

**Unit title:** Radio: Technical Operations, Recording and Editing

### Evidence requirements

Candidates will need evidence to demonstrate their knowledge and/or skills by showing that they can:

- ◆ create edited audio files, incorporating voice, music and sound effect tracks
- ◆ synchronise tracks within the recording
- ◆ balance track levels appropriately
- ◆ edit recordings to broadcast standard

Candidate must create at least **four** multi-track sessions to be mixed down to single file and saved on computer.

Recorded material must be retained for inclusion in the portfolio of evidence to be submitted for assessment.

Two tracks per multitrack session is the minimum evidence requirement.

Each session must consist of at least two different types of track i.e. one voice track and one music track.

Centres should consider the following types of recordings for assessment:

- ◆ a multitrack session and mix down for a radio commercial of no more than 60 seconds
- ◆ a multitrack session and mix down for a programme trail of no more than 50 seconds
- ◆ a multitrack session and mix down for an opening to a magazine show of no more than 60 seconds
- ◆ a multitrack session and mix down for a programme or station ident of no more than 30 seconds

A competent recording means that a healthy signal without distortion is saved to a computer file and capable of replay without error. A competent edit means that all out-takes are cleanly silenced and that the remaining material is structured/restructured to a standard suitable for broadcast. Each session and mix down must be capable of replay without error.

An assessor's checklist must be used to record all the required assessment information.

### Assessment guidelines

- After creating the above voice tracks in the studio the candidate may transfer the material to another non-studio based computer for final mixing and saving.

## **Administrative Information**

<b>Unit code:</b>	DM1C 34
<b>Unit title:</b>	Radio: Technical Operations, Recording and Editing
<b>Superclass category:</b>	KA
<b>Date of publication:</b>	February 2005
<b>Version:</b>	01
<b>Source:</b>	SQA

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## **Higher National Unit specification: support notes**

### **Unit title:** Radio: Technical Operations, Recording and Editing

This part of the Unit specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 80 hours.

### **Guidance on the content and context for this Unit**

This unit is primarily technical in nature, aimed at enabling the candidate to set up studios for recording, operate the studios, and record and edit material to single and multitrack files. Standard equipment would consist of a mixer desk, microphones, CD player, MD player, computer with software package for recording and editing, telephone facility, possibly a tuner, cassette player, gram deck and a second studio or booth with talkback facility. The digital audio software package should include a facility for multitrack recording and editing. To free up studio time candidates' studio based recordings can be transferred to non-studio based computers (e.g. when on an intranet) for further editing and mixing.

Computer packages will of course differ but the basic principles underlying their operation tend to be the same, therefore a candidate moving into industry should adapt quickly to whatever package is being used.

### **Guidance on the delivery and assessment of this Unit**

For outcome 4 it is recommended that candidates do not create too complex a session. The purpose of the outcome is to ensure that candidates understand the basic principles of how to create a session and mix down. They have the opportunity to create four different types of session but as they gain in confidence there can be a temptation to spend too much time creating overly complex pieces which unnecessarily ties up resources beyond the need of assessment requirements. This outcome will be particularly useful to candidates going on to complete the Radio Commercials unit which is part of the HNC Radio Broadcasting framework

This is a mandatory unit of the HNC Radio Broadcasting framework. There is an opportunity to integrate this unit with other core units which are part of the group award, for example, Outcome 3: Radio: Technical Operations, Recording and Editing require the candidate to meet the technical skill 'dub a recorded interview'. This can integrate with Outcome 3 of Radio Interviewing which requires the candidate to conduct location interviews, one of which can be used for the dubbing.



## **Higher National Unit specification: support notes (cont)**

### **Unit title:** Radio: Technical Operations, Recording and Editing

Outcome 3 of Radio: Technical Operations, Recording and Editing requires the candidate to meet the technical requirement 'record a studio based interview'. This can integrate with outcome 4 of Radio Interviewing which requires the candidate to 'Conduct and Edit Studio Based Interviews i.e. a telephone and a studio interview (e.g. one to one interview).

Outcome 1 and 2 of Radio: Technical Operations, Recording and Editing requiring the preparation of studios for broadcast and the operation of studio equipment, can integrate with the core unit Radio Interviewing outcome 4 which requires the recording of a studio based interview (if the interviewee for the studio is located in another studio for the operation of studio talkback.)

This would include the mixing desk and any fader and tonal adjustments; speaker and headphone volumes. Check operation of cue lights, talk-back, red lights for mic and studio. Acoustic checks would include placing of any acoustic screens and ensuring studio speakers are not on and doors closed. Ensure any ancillary equipment such as mini disc recorders, CD players, grams, cassette and computers etc are functioning correctly. The candidate should be able to undertake these tasks with a reasonable degree of speed and confidence. The preparation should be done just prior to a recording. Any trailing cables should be dealt with effectively, CD's scripts and inserts arranged in a safe and orderly manner ready for use.

Operation of basic equipment includes the operation of any headphones, CD or MD players, gram decks, computer inputs, etc. Use of talkback can be applied via means of a contribution from a contributor in another studio or booth. Good studio discipline includes polite behaviour and ensuring red light protocol is observed. Candidates will require practice time in the studio before attempting this assessment. As an aid, assessors might draw up short formative exercises for each candidate to complete. It is important that candidates check throughout the operation for any signs of under or over recording of levels and make appropriate adjustments.

## **Higher National Unit specification: support notes (cont)**

**Unit title:** Radio: Technical Operations, Recording and Editing

Radio Presentation

Outcome 1 and 2 Radio: Technical Operations, Recording and Editing requiring the preparation of studios for broadcast and the operation of studio equipment can also integrate with the core unit Radio Presentation outcomes 2 or 3 where candidates record music shows (but it must also include a talkback facility to another studio)

### **Open learning**

This Unit could be delivered by distance learning. However, it would require planning by the centre to ensure sufficiency and authenticity of candidate evidence. Arrangements would have to be made to ensure that the assessments for the Outcomes were undertaken in suitable (professional radio studio) conditions.

### **Candidates with additional support needs**

This Unit specification is intended to ensure that there are no artificial barriers to learning or assessment. The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments or considering alternative Outcomes for Units. For information on these, please refer to the SQA document *Guidance on Special Assessment Arrangements for Candidates with Additional Support Needs* ([www.sqa.org.uk](http://www.sqa.org.uk)).

## **General information for candidates**

### **Unit title:** Radio: Technical Operations, Recording and Editing

This unit is designed to enable you to prepare and operate a radio studio for recording and editing purposes. You will become familiar with digital recording and editing and learn how to record single and multitrack recordings. The skills and knowledge inherent in this unit are basic requirements for any radio station. The material you record can tie in with other core units which are part of the HNC Radio Broadcasting framework i.e. Radio Presentation and Radio Interviewing.

You will learn about how to set up the various parts of the studio in preparation for a recording and ready for broadcast. This includes the mixing desk, associated equipment such as CD players, mini disk recorders, microphones and computer etc. Observing studio protocol, discipline and safety will be considered an essential part of any studio preparation and recording. Recording will include the use of studio talkback, setting levels, making any tonal adjustments and operating equipment to basic on air standards. As part of recording and editing you will learn how to do a studio recording and how to dub across a one-to-one interview for editing. Finally you will be introduced to the basics of multitrack recording and editing, skills you will find particularly useful for quickly making up trails, commercials, programme or station idents.