

NCFE Level 1 Technical Award in Music Technology (601/6777/4) NCFE Level 2 Technical Award in Music Technology (601/6774/9)

Paper number: P002083 (Practical)

Assessment window: 18 October 2021 - 29 October 2021

Time allowed: 2 hours

Total marks: 36

Please complete the details below clearly and in BLOCK CAPITALS.

Centre name	Centre number	
Learner name	Learner number	

Learner declaration:

I confirm that the work contained in this external assessment is all my own work.

I have not copied work directly from handouts/internet/textbooks or any other publication.

If I have used a quote, then I have referenced this appropriately.

My full name above is my registered name with NCFE.

Learner signature:		Date:
Learner Siuriature.		Date.

Learner instructions

- Complete all tasks.
- Read the scenario and each task carefully.
- The marks available for each question are shown in brackets.
- Use black or blue ink.

Resources

- Word processor or pen.
- Headphones/speakers.
- Individual workstation/device with:
 - access to a digital audio workstation (DAW)
 - audio output & controller input capabilities
 - the capacity to save/store digital files.
- Audio/MIDI files:
 - Drums & Bass.wav
 - Electric Guitar.wav
 - Acoustic Guitar.wav
 - Vocal.wav
 - Keys (MIDI).mid

To be completed by the examiner	Mark
Task 1	/9
Task 2	/9
Task 3	/9
Task 4	/9
TOTAL	/36

Instructions continue over the page. Please turn over.

Evidence Requirements

Each task tells you what evidence you need to provide. This will include:

- audio files
- explanations and reviews of the processes you have applied. These could include:
 - written responses (either in the space provided after each task or as a separate wordprocessed document)
 - annotated screenshots
 - screencasts with commentary. Screencasts must be no longer than 3 minutes per task.

Electronic Evidence

If you have produced screenshots as evidence, put them in a single electronic document. If you have produced any electronic written responses, put them in the same document. Clearly label each piece of evidence with the evidence reference shown in **bold** in each task.

Save the document with the following file name:

 Surname_Initial_learner number eg. Smith_J_123456789.

The preferred format for documents is PDF. Your invigilator will be able to advise you of other acceptable file formats, if required.

Audio files should be saved as .wav, .mp3 or .aiff files. Save them with the following file name:

 Surname_Initial_learner number_evidence reference eg Smith_J_123456789_Task 3 Rough Mix.

Do not submit DAW files or MIDI files as evidence.

The Invigilator will tell you your learner number and you can see the evidence reference in **bold** on each task.

At the end of the assessment there is a checklist. Use this to help you make sure that you have included all of the evidence needed.

You should remember to save your work regularly during the assessment.

Do not turn over until the invigilator tells you to do so.

Scenario

You work as an independent producer and engineer.

You have been contacted by a local band. They have asked you to mix and edit the recording session files for a new song that they are going to release online.

The tasks begin on the next page. Please turn over.



Task 1 - Configuration

[9 marks]

You should spend approximately **30 minutes** on this task.

1a. The software and hardware of your Digital Audio Workstation (DAW) have technical features which allow you to edit, develop and mix the recording session files.

Describe these technical features.

1b. Complete the following steps:

- Create a new project in your DAW software.
- Set the tempo to 75 bpm.
- Create 4 audio tracks.
- Create 2 software instrument tracks.
- Set the audio output for your monitoring equipment.

Explain how you completed these tasks.

1c. Complete the following steps:

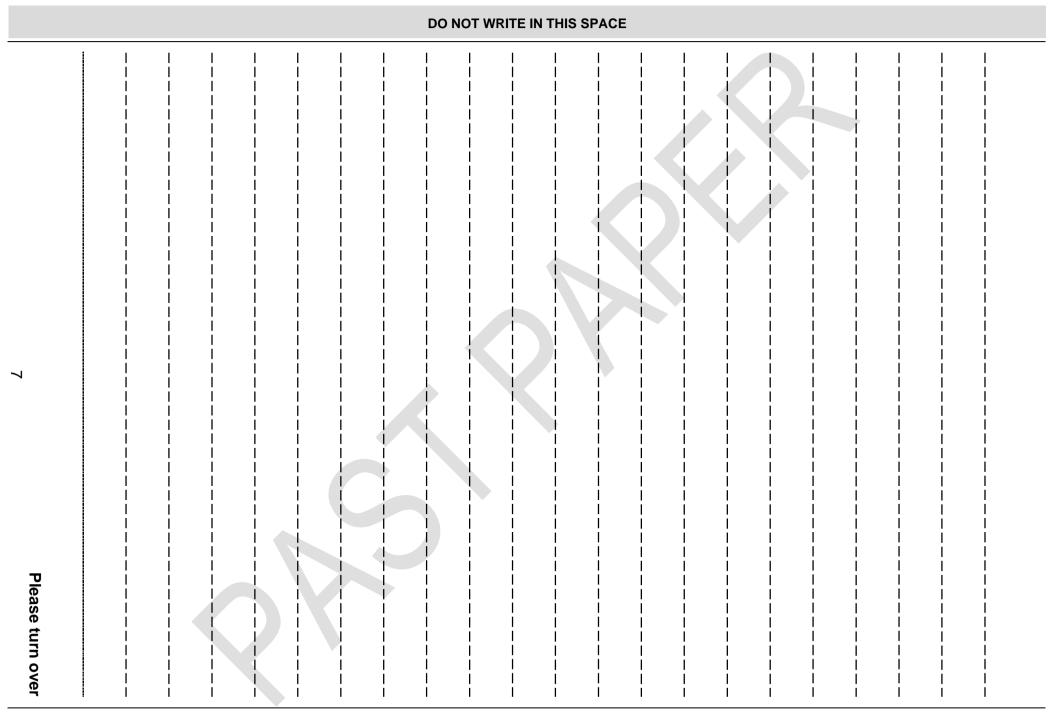
- Import the audio files labelled **Drums & Bass**, **Electric Guitar**, **Acoustic Guitar** and **Vocal** onto the audio tracks that you created in Task 1b so that all files start at bar 1.
 - The Electric Guitar part will begin at bar 1.
 - The **Drums & Bass** part will begin at bar 3.
 - The **Vocal** part will begin during bar 3.
 - The Acoustic Guitar part will begin at bar 27.
- Import the MIDI file labelled **Keys (MIDI)** onto the first software instrument track so that it starts at bar 1 (the part will begin during bar 14).
- Select a piano instrument sound for the **Keys (MIDI)** part.
- Label the spare software instrument track '12 Bar Blues MIDI' to prepare for Task 3.

Explain how you completed these tasks.

Evidence required:

- A screenshot showing your whole project at this point, labelled Screenshot 1.
- A written response using the answer space below or in a separate document labelled
 Task 1. In this written response you should:
 - describe the DAW software and any other equipment you are using
 - explain how you completed the tasks in 1b and 1c.

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Task 2 – Editing [9 marks]

You should spend approximately **30 minutes** on this task.

2a. There is a 4-note chord played during bar 14 of the **Keys (MIDI)** part. Use MIDI editing tools to adjust the pitches of this chord so that the notes form a G7 chord.

Explain how you completed this task.

2b. In bars 39 and 40 the **Acoustic Guitar** audio part is out of time with the other parts. Use audio editing tools to make sure that the **Acoustic Guitar** chords play on the first beat of the bar.

Explain how you completed this task.

2c. There is a chord played in the **Acoustic Guitar** audio part at the beginning of bar 41. Use audio editing to remove the unwanted noises that follow this chord in the rest of the bar.

Explain how you completed this task.

2d. Silence all audio and MIDI tracks except for the **Electric Guitar** audio part from beat 3 of bar 50 to the end of bar 50.

Explain how you completed this task.

2e. Complete the following steps:

- Mute the Vocals audio track so that you can only hear the Drums & Bass, Electric Guitar and Acoustic Guitar audio tracks, and Keys (MIDI) MIDI part.
- Export the full song to a suitable stereo format.
- Save the stereo audio file as 'Surname Initial learner number Mix 1'.

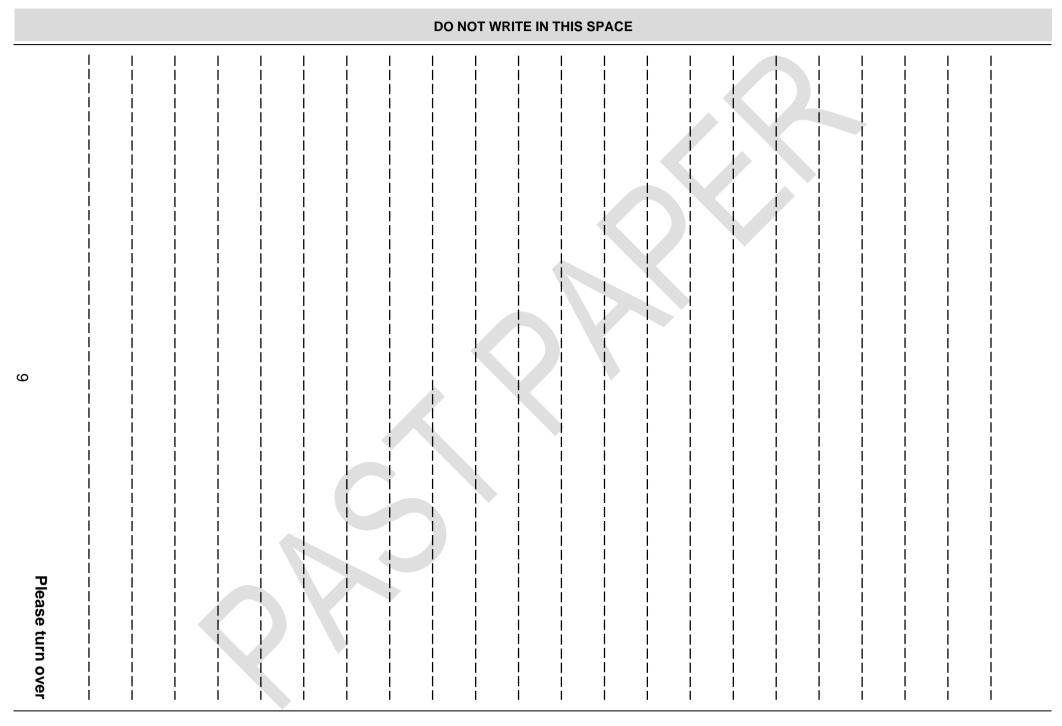
Explain how you completed these tasks.

Evidence required:

'Mix 1' stereo audio file.

- A screenshot showing your whole project at this point, labelled **Screenshot 2.**
- A written response using the answer space below or in a separate document labelled
 Task 2 explaining how you completed tasks 2a, 2b, 2c, 2d and 2e.

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Task 3 – Musical Development

[9 marks]

You should spend approximately 30 minutes on this task.

3a. Apply a flanger or similar modulation effect to the **Keys (MIDI)** part from bar 51 to bar 63 to make it sound different from the rest of the song.

Explain how you completed this task.

3b. Create a new sound for your **12 Bar Blues MIDI** track by selecting and editing a software instrument. The sound that you create should be suitable for the style of the song.

Explain the following:

- Your choice of software instrument type.
- Your use of timbre editing in the software instrument.
- Your use of envelope editing in the software instrument.

Explain how you completed this task.

3c. Create an original part on the **12 Bar Blues MIDI** track, from bar 27 to the end of bar 38. Use a 12-bar blues chord sequence in C major.

You should use the table below to make sure your original part follows the 12-bar blues chord sequence.

Bar	27	28	29	30
Chord	C major	C major	C major	C major
Bar	31	32	33	34
Chord	F major	F major	C major	C major
				•
Bar	35	36	37	38
Chord	G major	F major	C major	C major

Explain how you completed this task.

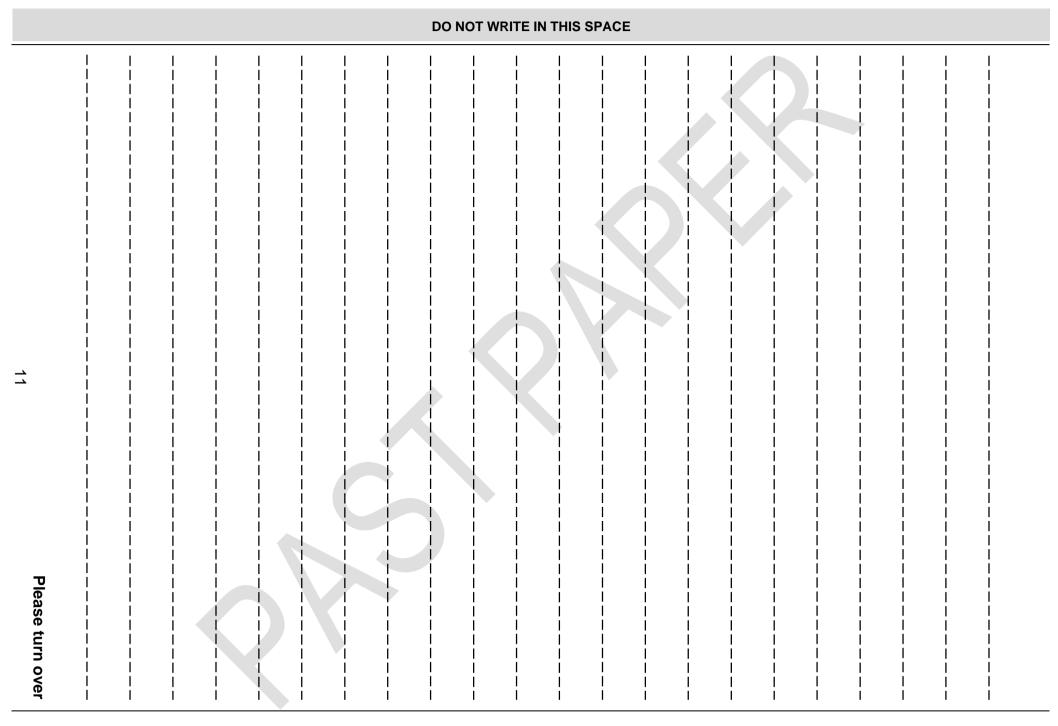
3d. Complete the following steps:

- Mute the Electric Guitar, Acoustic Guitar and Vocal audio tracks so that you can only hear the Drums & Bass audio track, Keys (MIDI) and 12 Bar Blues MIDI parts.
- Export the song to a suitable stereo format.
- Save the stereo audio file as 'Surname_Initial_learner number_Mix 2'.

Explain how you completed these tasks.

Evidence required:

- A screenshot showing your whole project at this point, labelled **Screenshot 3.**
- A written response using the answer space below or in a separate document labelled **Task 3** explaining how you completed tasks **3a**, **3b**, **3c** and **3d**.
- 'Mix 2' stereo audio file.



Task 4 – Mixing [9 marks]

You should spend approximately **30 minutes** on this task.

4a. Use EQ to reduce the high frequency hiss noise heard throughout the **Electric Guitar** audio part.

Explain how you completed this task.

4b. Unmute all of the audio and MIDI tracks. Complete the following steps:

- Add reverb to the Drums & Bass and Vocal audio tracks, and to the Keys (MIDI) and 12 Bar Blues MIDI tracks. You want them to sound like they were recorded in the same room as the other instruments.
- Use automation to pan the **Keys (MIDI)** part hard-right from the start of bar 15 to the end of the song.
- Use automation to pan the **Electric Guitar** audio part hard-left from the start of bar 15 to the end of the song.
- Create a slow fade out for all tracks, from bar 59 to the start of bar 63.

Explain how you completed these tasks.

4c. Create a final mix using volume balance, panning, dynamics processing, automation and any additional effects processing that you wish to apply creatively.

Explain how you completed this task.

4d. Complete the following steps:

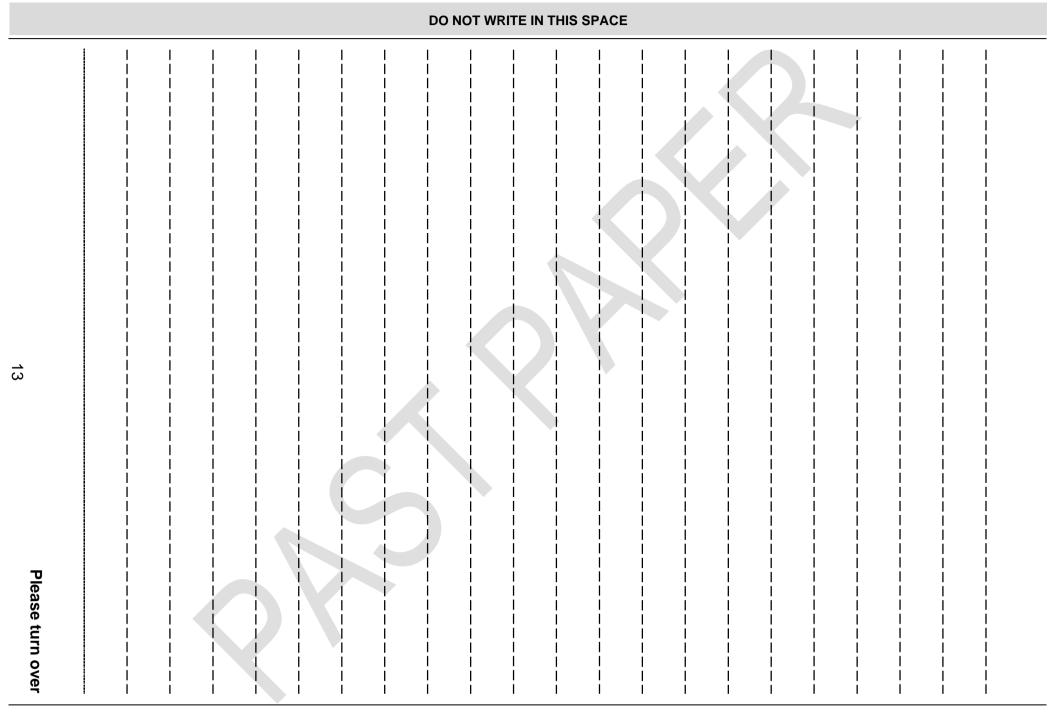
- Make sure that all audio and MIDI tracks can be heard.
- Make sure that start and finish markers leave no more than one second of silence at the beginning and end of the track.
- Export the song to a suitable stereo format.
- Save the stereo audio file as 'Surname_Initial_learner number_Mix 3'.

Explain how you completed these tasks.

Evidence required:

'Mix 3' stereo audio file.

- A screenshot showing your whole project at this point, labelled Screenshot 4.
- A written response using the answer space below or in a separate document labelled **Task 4** explaining how you completed tasks **4a**, **4b**, **4c** and **4d**.



Evidence Checklist

T! N!	F. Change T. a	Please tick (✓) one		
Task Number	Evidence Type	Handwritten	Electronic	
Task 1	Screenshot			
Task 1	Written response			
Task 2	Screenshot			
Task 2	Written response			
Task 2	Audio file			
Task 3	Screenshot			
Task 3	Written response			
Task 3	Audio file			
Task 4	Screenshot			
Task 4	Written response			
Task 4	Audio file			

This is the end of the external assessment.