Specification
GCE Music Technology

Pearson Edexcel Level 3 Advanced Subsidiary GCE in Music Technology (8MT01)
First examination 2014

Pearson Edexcel Level 3 Advanced GCE in Music Technology (9MT01)
First examination 2014

Issue 3

ALWAYS LEARNING

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About this specification

Edexcel GCE in Music Technology is designed for use in school and colleges. It is a part of a suite of GCE qualifications offered by Edexcel.

Key features of the specification

Embracing new technology

Music technology, like other forms of technology, advances rapidly. This specification provides opportunities to embrace recent developments in the field.

Emphasis on a wide range of practical work

This Music Technology specification involves much practical work and encourages the cultivation of a wide range of skills. Students will have opportunities to:

- sequence MIDI
- sequence audio
- record live instruments
- produce CDs
- compose using music technology.

Understanding technical processes and principles

Students will have opportunities to build understanding of the technical processes and principles that underpin effective use of music technology, and comment on it in writing.

Progression to higher education (HE) and a career

There are many important opportunities in higher education, and many career possibilities for those proficient in handling music technology. GCE in Music Technology has been widely accepted by higher education and will continue to provide valuable experience and preparation for students aiming for HE in the subject. Music technology careers could include work as a:

- sound engineer
- record producer
- teacher.

Why choose this specification?

Music technology plays a key role in music across the world. This qualification (the only Advanced Subsidiary and advanced level GCE in Music Technology) is designed to open up a range of exciting and useful tasks to a wide candidature, and to encourage students to learn about the subject. Students, including those who do not play a traditional instrument, are encouraged to explore their musicality and create original materials using technology. Like its predecessor this specification retains an emphasis on practical tasks, but it is slimmed down and updated, with all tasks appropriate to styles of music that use music technology.

Supporting you

Edexcel aims to provide the most comprehensive support for our qualifications. We have therefore published our own dedicated suite of resources for teachers and students written by qualification experts. We also endorse a wide range of materials from other publishers to give you a choice of approach. For more information on our wide range of support and services for this GCE in Music Technology qualification, visit our GCE website: www.edexcel.com/gce2008.

Specification updates

This specification is Issue 3 and is valid for examination from Summer 2014. If there are any significant changes to the specification Edexcel will write to centres to let them know. Changes will also be posted on our website. For more information please visit www.edexcel.com or www.edexcel.com/gce2008.

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AS   Unit 1: Music Technology Portfolio 1   *Unit code 6MT01

- Externally assessed
- Availability: June

| 70% of the total AS marks | 35% of the total GCE marks |

Content summary

Students will learn and use a variety of music and music technology skills in order to complete this unit. MIDI sequencing and multi-track recording as well as arranging skills are all key components assessed through the practical work carried out.

Students must complete three tasks which together make the Music Technology Portfolio 1:

- Task 1A: Sequenced Realised Performance
- Task 1B: Multi-track Recording
- Task 1C: Creative Sequenced Arrangement.

Students will also submit a logbook that will provide information on the resources used in each task as well as assessed questions on their creative sequenced arrangement.

Assessment

Students will produce an audio CD entitled 'Music Technology Portfolio 1', containing three tracks of work as specified in the three tasks above. They will also present a logbook.

The work is to be done under coursework conditions between the issue of the stimulus material in September and the submission date.

The logbook will detail equipment used and be used to answer two assessed questions on their creative sequenced arrangement.

AS | **Unit 2: Listening and Analysing** | *Unit code 6MT02**

- Externally assessed
- Availability: June

| 30% of the total AS marks | 15% of the total GCE marks |

Content summary

This unit provides students with an opportunity to study the styles most common in popular music. Students will have the opportunity to demonstrate this knowledge using aural discrimination skills.

Students are required to study the development of popular music styles from 1910 through to the present day. This is not intended to be a comprehensive and in-depth study of every popular, jazz or rock music style, but an overview of the main styles and trends during the development of popular music.

Two special focus styles will be selected each year for more in depth study. For the special focus styles, in addition to the main fingerprints of the style, students will be expected to have an extended knowledge and understanding of context.

Assessment

1 hour 45 minute listening examination.

Each student will have a copy of an audio CD supplied by Edexcel, containing recorded excerpts.

* See *Appendix 5* for description of this code and all other codes relevant to this qualification.

A2 Unit 3: Music Technology Portfolio 2   *Unit code 6MT03

- Externally assessed
- Availability: June

60% of the total A2 marks

30% of the total GCE marks

Content summary

Unit 3 builds on skills acquired in Unit 1, and extends these to include a composition task. It involves detailed study of Area of Study 3: The Development of Technology-based Music.

Students must complete three tasks which together make the Music Technology Portfolio 2:

- Task 3A: Sequenced Integrated Performance
- Task 3B: Multi-track Recording
- Task 3C: Composing using Music Technology.

Students will also submit a logbook which will provide information on the resources used in each task.

Assessment

Students will produce an audio CD entitled 'Music Technology Portfolio 2', containing three tracks of work as specified in the three tasks above. They will also present a logbook, detailing equipment used.

The work is to be done under coursework conditions between the issue of the stimulus material in November and the submission date.

| A2 | **Unit 4: Analysing and Producing** | ***Unit code 6MT04** |

- Externally assessed
- Availability: June

| **40% of the total A2 marks** | **20% of the total GCE marks** |

Content summary

Students will be expected to demonstrate their knowledge of music and the principles of music technology through a series of written commentaries, manipulations and production tasks using material provided on an examination paper and recorded on an audio CD.

The examination will test students' musical understanding, their ability to manipulate and correct recorded music and their ability to write commentaries on technological processes. They will also be tested on their ability to produce a balanced stereo mix.

Assessment

This assessment will take the form of a 2-hour examination.

Each student will have an audio CD, which will contain a series of music files to be imported into music production software. Each student will also have an examination paper in which some or all of the CD tracks will be notated as conventional staff notation, editing grids or numerical data.

* See *Appendix 5* for description of this code and all other codes relevant to this qualification.

Summary of assessment requirements

Unit number and unit title	Level	Assessment information	Number of marks allocated in the unit
Unit 1: Music Technology Portfolio 1	AS	Students will produce an audio CD entitled 'Music Technology Portfolio 1', containing three tracks of work as specified in the three tasks below. They will also present a logbook. The work is to be done under controlled conditions between the issue of the stimulus material in September and the submission date. **Task 1A: Sequenced Realised Performance** (40 marks) The sequenced realised performance will be based on a recording of a piece of music specified by Edexcel. A skeleton score, but not the recording, will be provided by Edexcel. Students will be assessed on the following areas: ■ Realisation of Pitch and Rhythm ■ Choice of Timbre and Mix ■ Musicality — Dynamics, Articulation and Phrasing ■ Music Technology Skills. **Task 1B: Multi-track Recording** (40 marks) Students will record a piece of their own choice from *Area of Study 2: Popular Music Styles since 1910*, lasting between two and four minutes. Recordings must have at least eight live tracks (no MIDI) of which at least four tracks captured using microphones. Students will be assessed on the following areas: ■ Capture ■ Processing ■ Mixing. **Task 1C: Creative Sequenced Arrangement** (40 marks) The creative sequenced arrangement will be based on one of two prescribed stimuli supplied by Edexcel. The chosen stimulus will be worked in one of two prescribed styles. The work must show creative development and/or manipulation of the chosen stimulus, and extend to between two and three minutes. Students will be assessed on the following areas: ■ Instrumentation, Timbre and Texture ■ Melody and Rhythm ■ Structure, Harmony and Tonality ■ Music Technology Skills.	140

Unit number and unit title	Level	Assessment information	Number of marks allocated in the unit
Unit 1: Music Technology Portfolio 1 (*continued*)		**Logbook** (20 marks) Students will use this document to detail equipment used and to answer two questions on their creative sequenced arrangement. Students must complete their Music Technology Portfolio 1 under controlled conditions.	
Unit 2: Listening and Analysing	AS	A 1 hour 45 minute listening examination, externally assessed, in the summer of the year of entry. The style of questions will range across multiple choice, short answer and questions requiring a few sentences of continuous prose. First and foremost the questions will assess knowledge of *Area of Study 2: Popular Music Styles since 1910*, but understanding of *Area of Study 1: The Principles and Practice of Music Technology* is also required. Each student will have a copy of an audio CD supplied by Edexcel and containing recorded excerpts. The examination paper has two sections, A and B and will be structured as follows. **Section A** (40 marks) Questions 1–4 will test students' aural perception of musical characteristics and features of the given extracts, including relevant technological aspects. The extracts will be drawn from *Area of Study 2: Popular musical styles since 1910*. These questions will be equally weighted. **Section B** (40 marks) Questions 5 and 6 will be drawn from the two special focus styles as detailed above, testing both students' aural perception and their wider understanding and knowledge of the style/genre. The two questions will be equally weighted. Special focus styles, which will change each year, are listed in the unit content.	80

Unit number and unit title	Level	Assessment information	Number of marks allocated in the unit
Unit 3: Music Technology Portfolio 2	A2	Students will produce an audio CD entitled 'Music Technology Portfolio 2', containing three tracks of work as specified in the three tasks below. They will also present a logbook.	120
		The work is to be done under coursework conditions between the issue of the stimulus material in September and the submission date.	
		Task 3A: Sequenced Integrated Performance (40 marks)	
		The sequenced integrated performance will be based on a recording of a piece of music selected from a choice of two specified by Edexcel. Neither a skeleton score nor a recording will be provided by Edexcel.	
		The sequenced integrated performance must contain a live audio recording of the vocals and, if the student wishes, other live audio track(s), which must be integrated with the other sequenced tracks.	
		Students will be assessed on the following areas:	
		■ Realisation of Pitch and Rhythm	
		■ Choice of Timbre and Mix of Timbres and Vocals	
		■ Musicality of Sequencing — Dynamics, Articulation and Phrasing	
		■ Music Technology Skills.	
		Task 3B: Multi-track Recording (40 marks)	
		Students will select one recording topic from a choice of two. Students will record a piece lasting between three and five minutes. Recordings must have between 12 and 24 live tracks (no MIDI). Close-mic and direct-inject (DI) capture will be required (with at least eight tracks captured using microphones).	
		Students will be assessed on the following areas:	
		■ Capture	
		■ Processing	
		■ Mixing.	

Unit number and unit title	Level	Assessment information	Number of marks allocated in the unit
Unit 3: Music Technology Portfolio 2 (*continued*)		**Task 3C: Composing using Music Technology** (40 marks) The task will be based on one of three prescribed briefs set by Edexcel. Students will compose a piece lasting between three and four minutes as specified in their chosen brief. Students will be assessed using four compulsory criteria plus one optional criterion. Compulsory criteria: 1. Quality of ideas and outcome 2. Coherence 3. Timbres and textures 4. Music technology skills. Optional criteria (one is selected from the following three): 1. Harmony 2. Melody 3. Rhythm. **Logbook** Students will use this document to detail equipment used. (There are no marks available for completing the logbook but students' work cannot be assessed if this is not completed.) Students must complete their Music Technology Portfolio 2 under controlled conditions.	
Unit 4: Analysing and Producing	A2	This assessment will take the form of a 2-hour examination. There are two sections in the examination paper and students must complete both. **Section A** (62 marks) ■ Questions 1-4 will test students' musical understanding, their ability to manipulate and correct recorded music and their ability to write commentaries on technological processes. **Section B** (18 marks) ■ Question 5 will be a practical test involving the production of a balanced stereo mix. Each student will have an audio CD which will contain a series of music files to be imported into music production software. Each student will also have an examination paper in which some or all of the CD tracks will be notated as conventional staff notation, editing grids or numerical data. Students will be required to review the materials, commenting on musical elements and technological processes, identifying mistakes and discrepancies and correcting them and, finally, producing a stereo mix.	80

Assessment objectives and weightings

		% in AS	% in A2	% in GCE
AO1	Interpret musical ideas with technical and expressive control and a sense of style and awareness of occasion and/or ensemble (performing/realising).	15%	15%	15%
AO2	Create and develop musical ideas with technical control and expressive understanding making creative use of musical devices, conventions and resources (composing/arranging).	15%	16%	15.5%
AO3	Demonstrate understanding of, and comment perceptively on, the structural, expressive and contextual aspects of music (appraising).	25%	10%	17.5%
AO4	Demonstrate effective use of music technology to capture, edit and produce musical outcomes.	30%	39%	34.5%
AO5	Demonstrate understanding of and comment perceptively on the technical processes and principles that underpin effective use of music technology.	15%	20%	17.5%
	TOTAL	100%	100%	100%

Relationship of assessment objectives to units

Unit number	Assessment objectives					
	AO1	**AO2**	**AO3**	**AO4**	**AO5**	**Total for AO1, AO2, AO3, AO4 and AO5**
Unit 1	7.5%	7.5%	5%	15%	–	35%
Unit 2	–	–	7.5%	–	7.5%	15%
Unit 3	7.5%	8%	–	14.5%	–	30%
Unit 4	–	–	5%	5%	10%	20%
Total for Advanced GCE	**15%**	**15.5%**	**17.5%**	**34.5%**	**17.5%**	**100%**

Qualification summary

Subject criteria

The General Certificate of Education is part of the Level 3 provision. This specification is based on the Advanced Subsidiary GCE and Advanced GCE Subject criteria for Music Technology; which are prescribed by the regulatory authorities and are mandatory for all awarding bodies.

The Advanced Subsidiary GCE and Advanced GCE in Music Technology has been designed to:

- encourage students to extend the knowledge, skills and understanding of music technology needed to communicate their creative ideas through composing, performing and listening

- encourage students to engage in, and extend their appreciation of, the diverse and dynamic heritage of music, promoting spiritual and cultural development

- encourage students to develop particular strengths and interests, encouraging lifelong learning and providing access to music-related careers

- provide a stimulating, challenging, comprehensive course of study that broadens experience, develops imagination, fosters creativity and promotes personal and social development.

For Advanced GCE, this specification aims to:

- extend the skills, knowledge and understanding developed in the AS and provide a basis for further study.

Aims

The aims of the Advanced Subsidiary GCE and Advanced GCE in Music Technology are to:

- emphasise the techniques, practices and principles of music technology as an area of advanced study

- encourage the use of music technology as a tool to develop composing and arranging skills

- provide a programme of study that will lead to the development of accomplished recording and sequencing skills

- define musical performance as an interpretative and creative skill that can use music technology

- introduce the technical principles that underpin music technology and develops a technical vocabulary

- develop listening and analysis skills through the study of a wide range of contemporary music

- place a significant emphasis on coursework and practical activities — 60% externally marked coursework in both AS and A2

- prepare students for further academic or vocational study of music technology and related creative areas.

AS/A2 knowledge and understanding

This Advanced Subsidiary GCE and Advanced GCE specification requires students to develop knowledge and understanding of the use of music technology for music creation and production. Students will:

- learn how to make the correct choice of appropriate equipment for practical tasks by understanding the theory that underpins the practice.

- investigate the development of music technology and its use in popular music across time.

AS/A2 skills

This Advanced Subsidiary and Advanced GCE specification requires students to develop a wide range of practical and analytical skills.

C Music Technology unit content

Course structure

- Edexcel's GCE in Music Technology comprises four units and contains an Advanced Subsidiary subset of two AS units.

- The Advanced Subsidiary GCE is the first half of the GCE course and consists of Units 1 and 2. It may be awarded as a discrete qualification or contribute 50 per cent of the total Advanced GCE marks.

- The full Advanced GCE award consists of the two AS units (Units 1 and 2), plus two A2 units (Units 3 and 4). Students wishing to take the full Advanced GCE must, therefore, complete all four units.

- The A2, the second half of the Advanced GCE, comprises the other 50 per cent of the total Advanced GCE marks.

- The structure of this qualification allows teachers to construct a course of study which can be taught and assessed either as:

  ◆ distinct modules of teaching and learning with related units of assessment taken at appropriate stages during the course; or

  ◆ a linear course which is assessed in its entirety at the end.

Areas of Study (AoS)

Areas of Study (AoS) underpin the whole specification, encouraging both breadth and depth of knowledge and understanding. In addition, within individual units, they provide a contextual focus for students' practical and theoretical work.

There are **three** areas of study:

AoS 1: The Principles and Practice of Music Technology

AoS 2: Popular Music Styles since 1910

AoS 3: The Development of Technology-based Music

In Advanced Subsidiary students take *Area of Study 1: The Principles and Practice of Music Technology* and *Area of Study 2: Popular Music Styles since 1910*.

At A2 students have to extend *Area of Study 1: The Principles and Practice of Music Technology* and, in addition, work on *Area of Study 3: The Development of Technology-based Music*.

Area of Study 1: The Principles and Practice of Music Technology	This area of study concerns the music technology knowledge and skills that underpin the practical activities and some of the written work in this specification. It involves principally study and practice of MIDI sequencing, audio sequencing and recording. Each of these activities demands use of appropriate equipment and technical processes to capture sounds and manipulate them to produce musical results. Thus technology is the servant of music, not an end in itself.

Area of Study 2: Popular Music Styles since 1910

'Popular Music' is taken to include jazz as well as pop and rock. Students are not expected to study every type of popular music in detail, but to learn something of the main musical and cultural characteristics of the major style and trends of the past 100 years. These styles and trends range historically from ragtime and Dixieland jazz through to recent developments in club music and electronica. Some areas for investigation are the special focus styles prescribed in Unit 2. Other are suggested in the Teachers' Guide.

In studying the various genres and style, students are expected to have (in addition to technological terms and concepts) an understanding of relevant musical theory and terminology, including:

- staff notation (both treble and bass clefs)

- keys and chord symbols

- common types of structure and structural devices (eg verse-chorus forms, 32-bar structures, riffs, etc)

- common performance techniques such as portamento, pitch bend, fill, backbeat, pizzicato, arco, falsetto.

Area of Study 3: The Development of Technology-based Music

The aim of this area of study is to help students understand more about the development and influence of technology on music since 1910.

Study might include:

- instruments involving music technology: notably the electric guitar and keyboard synthesiser, and significant artists such as Les Paul, The Edge and the electro-rock bands of the 1980s; drum machines and decks and their role in the development of rap and hip hop; PA systems and stadium rock; the theremin in film and the ondes martinot in the work of Messaien

- recording practice: early recordings of jazz and the 'talkies', and the work of significant producers (such as Joe Meek, Phil Spector and Brian Eno); milestone albums (such as the Beatles' Sgt. Pepper's Lonely Hearts Club Band); significant techniques (such as multi-tracking, dub reggae and remixing)

- related developments in contemporary art music: installations and electronic music by composers such as Stockhausen and Steve Reich.

1.1   Unit description

1	**Music Technology practical unit**	Students will learn and use a variety of music and music technology skills in order to complete this unit. MIDI sequencing and Multi-track recording as well as arranging skills are all key components assessed through the practical work carried out under controlled conditions.
2	**Three tasks**	Students must complete three tasks which together make the Music Technology Portfolio 1:

- Task 1A: Sequenced Realised Performance

- Task 1B: Multi-track Recording

- Task 1C: Creative Sequenced Arrangement.

Each task will be submitted as a designated track on the Music Technology Portfolio 1 audio CD.

3	**Logbook**	Students will also submit a logbook which will provide information on the resources used in each task. A copy of the logbook can be found in *Appendix 1*.

1.2   Assessment information

1	**Task 1A: Sequenced Realised Performance (40 marks)**	Students will produce a sequenced performance based on a commercially available piece of music, prescribed by Edexcel. A skeleton score of the piece, but not a recording, will be provided by Edexcel. Centres must purchase sufficient copies of the recording for their students. It is essential that students have access to a recording of the prescribed track, as well as the skeleton score, in order to complete the task. Students must produce an accurate musical realisation of the track through sequencing of the prescribed piece, shaping, editing and mixing MIDI and audio data accordingly, with the help of appropriate software.

2	**Task 1B: Multi-track Recording (40 marks)**	Students will select a piece of music lasting 2–4 minutes which relates to *Area of Study 2: Popular Music Styles since 1910*, and make a recording of it. The performance recorded must be played and sung live, without any MIDI sequenced performance. The recording should be high quality with careful attention paid to the efficient capture, processing and mixing of musical information.
3	**Task 1C: Creative Sequenced Arrangement (40 marks)**	Students will be required to create an original arrangement, 2 to 3 minutes in length, of a prescribed stimulus in a prescribed style. There will be a choice of two stimuli, and a choice of two styles. Stimuli and styles will be associated with *Area of Study 2: Popular Music Styles since 1910*.
4	**Logbook (20 marks)**	Students must complete a logbook detailing the equipment used for all three tasks, and answering two questions on Task 1C. A copy of the logbook can be found in *Appendix 1*.
5	**Submission process**	Each student's submissions for Tasks 1A, 1B and 1C are to be recorded on one audio CD, to create the Unit 1 portfolio. The portfolio and the logbook will be submitted to Edexcel for external assessment in the summer of the examination year.

4   Controlled conditions

Students have the following number of hours to complete the three tasks in Music Technology Portfolio 1:

- a maximum of 20 hours to complete the Sequenced Realised Performance
- a maximum of 20 hours to complete the Multi-track Recording
- a maximum of 20 hours to complete the Creative Sequenced Arrangement.

The hours may be divided into any number of sessions but each session must be supervised.

Supervision must take place within the examination centre and students must work on their portfolio only in and during these hours. At other times students' work must be kept under secure conditions in the centre.

Students must not take portfolio home or anywhere else outside the room(s) in which the controlled conditions apply.

Students' access to any instruments or computers must be monitored by the supervisor. Students must not download material from the internet, or email their work home or anywhere else outside the room(s) in which the controlled conditions apply. Back-up copies of the work must not be taken out of the room(s) in which the controlled conditions apply.

All students should be advised by their teacher that the work must be their own, and that he/she will not sign their declaration form if the work appears not to be original. All students will also be required to sign the declaration form stating that the work is their own.

More guidance on the management of controlled conditions is provided in the *Getting Started* book.

1.3 Task 1A: Sequenced Realised Performance

1 What students need to learn

Study for this task should include:

- a range of popular music styles within *Area of Study 2: Popular Music Styles since 1910*

- sequencing skills, including methods of data entry, the editing and manipulating of timbres and parts, using controllers, processing, and audio within the sequencer

- the sonic and timbral possibilities available through the use of a variety of sound sources (eg software instruments, virtual sound modules, sample libraries and audio samples).

The skeleton score will be provided to centres in the September in the academic year of examination.

2 Nature of Task 1A

Students will be required to create a sequenced realised performance of a stimulus set by Edexcel and linked to *Area of Study 2: Popular Music Styles since 1910*, using a computer-based Sequencing program.

The sequenced realised performance must:

- be based on the prescribed song

- reproduce the sound of the original recording as accurately as possible in terms of pitch and rhythm

- come as near as possible to the style and sonic palette of the original recording, by means of appropriate choices, editing and blending of available sound sources

- be a realistic musical performance, arrived at through detailed shaping, editing and mixing of MIDI and audio data, together with the programming and editing of any software instruments and/or other plug-ins used

- demonstrate the ability to use technology creatively.

Task 1A is not an arranging task. Students are required to recreate the original track as accurately and stylistically as possible. However, examiners recognise that it may not always be possible to emulate accurately all the sounds and timbres in the original recording, especially vocal ones, and will reward students who are able successfully to circumvent the limitations of the equipment available to them.

Students may use a range of available sound sources and programming techniques. These could include GM soundsets, hardware/software sound modules and synthesisers, audio loops and samples, virtual studio instruments and sample libraries.

3 The stimulus

Each year Edexcel will prescribe a song for Task 1A. Centres will be provided with a skeleton score, which is likely to include:

- a vocal/melody line

- chord patterns

- bass riffs

- principal drum patterns and fills

- important melodic/harmonic riffs and licks

- details of all the instruments that must be included within the submission (minimum instrumentation).

Centres will not be provided with the recording, but will have to purchase copies.

The skeleton score will be provided to centres in the September in the academic year of examination.

4 Submission

The finished recording must be submitted as Track 1 on the Music Technology Portfolio 1 audio CD.

1.4 Task 1B: Multi-track Recording

1	What students need to learn	Study for this task should include:

- capturing, processing and mixing musical performances to make high-quality recordings
- recording between 8 and 12 live tracks, using close-mic and overdubbing
- balanced use of microphones and direct-inject (DI) capture
- music from *Area of Study 2: Popular Music Styles since 1910*, from which area of study the piece to be recorded must be selected.

2	Nature of Task 1B	Students will present for assessment a recording of a piece of music of their own choice in a style relating to *Area of Study 2: Popular Music Styles since 1910*.

Students must record a piece of music that is commercially available or an accepted rock, pop or jazz standard.

The recording should:

- last between 2 and 4 minutes
- use a minimum of eight and a maximum of 12 tracks
- contain a balanced use of close-mic and direct-inject (DI) capture
- have a minimum of four tracks captured using microphones
- make use of overdub techniques
- use only live musicians, and contain no MIDI sequenced performance
- be a noise-free stereo production with use of appropriate effects.

This task will not involve an assessment of the performance or the arrangement.

3	Responsibility	During the recording sessions, the student must be the sole person in control of the recording equipment (ie mixing desk). The student can retake the recording as many times as practical within the time available. The recordings must be made under the supervision of the teacher, and may not be made under professional guidance in commercial studios.

4	Submission	The finished recording must be submitted as Track 2 on the Music Technology Portfolio 1 audio CD.

1.5 Task 1C: Creative Sequenced Arrangement

1	**What students need to learn**	**Study for this task should include:**

- a range of popular music styles within *Area of Study 2: Popular Music Styles since 1910*

- sequencing skills, including methods of data entry, the editing and manipulating of timbres and parts, using controllers, processing, and audio within the sequencer

- arranging skills, including the understanding of the performance characteristics of different instruments, and the manipulation of musical material (melodic, rhythmic, harmonic, textural and structural)

- the sonic and timbral possibilities available through the use of a variety of sound sources (eg software instruments, virtual sound modules, sample libraries and audio samples).

2	**Stimuli**	Students will be required to develop an original arrangement, 2–3 minutes in length, from a prescribed stimulus. Each year a choice of two stimuli will be provided by Edexcel. The stimulus chosen must be developed in terms of one of two specified styles. Stimuli and styles will be made available to students in September of each examination year. Stimuli will involve staff notation.

3   Nature of Task 1C

The creative sequenced arrangement must:

- be between 2 and 3 minutes' duration

- be based on one of two prescribed stimuli

- be written in one of two prescribed styles

- demonstrate an ability to use the chosen instrumentation idiomatically and explore a variety of textures within the chosen style

- demonstrate an ability to build on the melodic, rhythmic, structural, harmonic and tonal implications of the chosen stimulus in terms of the chosen style

- demonstrate the ability to use the technology creatively.

The creative sequenced arrangement is to be more than a cover version, a remix or a transcription. It is expected that there will be reworking and extension of the stimulus material.

The arrangement may be undertaken in a number of ways. It might be realised by using:

- MIDI controlled virtual sound modules, eg Hypersonic 2

- MIDI and/or software instruments, eg Reason

- integrating MIDI and/or software instruments and/or audio samples and loops

- a variety of sound sources which may include:

  ◆ virtual sound modules

  ◆ virtual studio instruments

  ◆ sample library-based virtual Instruments

  ◆ loop-based sample instruments

  ◆ samples

  ◆ external sound modules and synthesisers.

Credit will be given for the manipulation, shaping, editing and/or processing of pre-recorded loops and samples. It is expected that there will be some form of editing of the patterns provided by loop-based sample instruments (eg Virtual Guitarist).

4   Submission

The finished recording must be submitted as Track 3 on the Music Technology Portfolio 1 audio CD.

1.6 Logbook

A copy of the logbook can be found in *Appendix 1*.

1.7 Assessment criteria for Task 1A: Sequenced Realised Performance

1	Method of marking	Each piece of work is marked according to both the holistic assessment criterion and the detailed assessment criteria. Holistic marking is used to ensure that the total mark derived from the other detailed assessment criteria is a true overall reflection of the standard of the student's work. If the holistic mark selected does not match the total of the detailed assessment criteria, the mark for each detailed criterion and/or the holistic mark must be reconsidered until a single mark appropriate for the work is identified.
2	Order in which the assessment criteria will be applied	Either the holistic assessment or the detailed assessment criteria may be applied first. The holistic criterion is given first below.

Holistic assessment criterion

Holistic		
36–40	Outstanding	A highly accurate sequence. Imaginative work displaying a high level of control and musicality. Sense of musical wholeness — the whole piece has been sequenced to a high standard.
31–35	Excellent	Convincing throughout in terms of accuracy, musicality and control. Any errors and/or misjudgements do not detract from a successful sequence.
26–30	Good	Convincing for most of the time in terms of accuracy, musicality and control. Some errors and/or misjudgements, but too few to have a big impact.
21–25	Competent	Generally secure in terms of accuracy, musicality and control. Some errors and/or misjudgements, but the performance still has a sense of direction and fluency.
16–20	Adequate	A serious attempt but some insecurity and inconsistency in terms of accuracy, musicality and control. Errors, misjudgements and technical problems begin to be intrusive, but the piece still holds together.
11–15	Basic	The accuracy of the data input is inconsistent. There is a lack of musicality and control. Errors, misjudgements and technical problems are intrusive.
6–10	Limited	Positive features are few. A few encouraging signs, but considerable difficulties — a weak end product in most areas. The submission may be incomplete.
0–5	Poor	Positive features are heavily outweighed by errors, misjudgements and technical problems. Insufficient work has been submitted to allow credit in every criteria.

Detailed assessment criteria

Criterion 1: Realisation of Pitch and Rhythm

1. Realisation of Pitch and Rhythm		
PITCH	8	Excellent accuracy of pitch.
	6–7	A few small slips which do not detract from the overall performance.
	4–5	Several errors (such as missed accidentals).
	2–3	Some significant intrusive errors and/or omissions, with unmusical effect.
	0–1	Limited accuracy, seriously compromising the performance.
RHYTHM	8	Excellent accuracy of rhythm. A musical performance.
	6–7	A few small slips which do not detract from the overall performance. A rhythmically accurate, but mechanical sequence.
	4–5	Some audible errors (such as poor rhythmic ensemble between parts).
	2–3	Some significant obtrusive errors and/or omissions, with unmusical effect.
	0–1	Limited accuracy, seriously compromising the performance.

Criterion 2: Choice of Timbre and Mix

2. Choice of Timbre and Mix		
TIMBRE	4	Well-chosen timbres — timbres have been edited as appropriate to suit the given stimulus material
	3	Appropriate choice of timbres, but no further editing to suit stimulus.
	2	Partially successful choice of timbres.
	0–1	Limited success in choosing appropriate timbres.
BALANCE/PAN	4	A musically balanced mix, faithful to the original. Effective placement in the stereo field.
	3	Mostly well balanced with some placement in the stereo field.
	2	Some unsuccessful blends or masking of important parts. Some misjudgements in stereo placement.
	0–1	Little sense of balance or blend. Little or no placement in the stereo field/serious misjudgements in panning.

Criterion 3: Musicality — Dynamics, Articulation and Phrasing

3. Musicality — Dynamics, Articulation and Phrasing		
DYNAMICS	4	Detailed and musically effective dynamics throughout. Some dynamic shaping as appropriate to instrumentation.
	3	Good overall dynamic contrasts, but little or no shaping.
	2	Some attempts to create dynamic contrasts, but some inconsistencies or misjudgements.
	0–1	Mechanical, unmusical and/or erratic. Limited attempt to create dynamic contrasts.
ARTICULATION AND PHRASING	4	Detailed and musically effective articulation and phrasing throughout.
	3	Generally effective articulation and phrasing.
	2	Some attempts to create articulation and phrasing, but some inconsistencies or misjudgements.
	0–1	Mechanical, unmusical and/or erratic. Little attention to articulation and phrasing.

Criterion 4: Music Technology Skills

4. Music Technology Skills		
STYLE AND CREATIVITY	4	Excellent sense of style including musical and controlled use of tempo shaping and effects as appropriate. Any fills or solos are well executed and stylistic. A musical sequence.
	3	A consistent sense of style with some attention to musical detail resulting in a generally successful sequence.
	2	Some inconsistencies in the application of tempo shaping and effects or a mechanical approach resulting in a more basic sequence.
	0–1	Limited sense of style with little attention to musical detail. A mechanical sequence
QUALITY OF RECORDING	4	An excellent recording demonstrating a high level of sonic accuracy, editing and presentation detail.
	3	A mostly successful recording but with small areas of inconsistency which do not detract from the overall presentation.
	2	A recording with some areas of inconsistency that detract from the final result – chopped beginning/ending, some clipping, some significant hiss.
	0–1	A poor recording with significant errors — noise or distortion, signal out of one speaker only, unacceptably low mastering level.

1.8 Assessment criteria for Task 1B: Multi-track Recording

1	Method of marking	Each piece of work is marked according to both the holistic assessment criterion, and the detailed assessment criteria. Holistic marking is used to ensure that the total mark derived from the other detailed assessment criteria is a true overall reflection of the standard of the student's work. If the holistic mark selected does not match the total of the detailed assessment criteria, the mark for each detailed criterion and/or the holistic mark must be reconsidered until a single mark appropriate for the work is identified.
2	Order in which the assessment criteria will be applied	Either the holistic assessment or the detailed assessment criteria may be applied first. The holistic criterion is given first below.

Holistic assessment criterion

Holistic		
36–40	Outstanding	An impressive recording in which all parts are clear, well balanced, successfully processed and mixed.
		Sense of wholeness — all aspects of the recording are of a high standard.
31–35	Excellent	Convincing throughout in terms of clarity, processing and mixing.
		Any errors and/or misjudgements do not detract from a successful recording.
26–30	Good	Convincing for most of the time in terms of clarity, processing and mixing.
		Some errors and/or misjudgements, but too few to have a big impact.
21–25	Competent	Generally secure in terms of clarity, processing and mixing.
		Some errors and/or misjudgements, but the recording is still broadly successful.
16–20	Adequate	A serious attempt but some insecurity and inconsistency in terms of clarity, processing and mixing.
		Errors, misjudgements and technical problems begin to be intrusive, but the recording still has some positive features.
11–15	Basic	There are some significant problems in terms of clarity, processing and mixing.
		Errors, misjudgements and technical problems are intrusive.
6–10	Limited	Positive features are few.
		A few encouraging signs, but considerable difficulties — a weak end product in most areas. The submission may be incomplete.
0–5	Poor	Positive features are heavily outweighed by errors, misjudgements and technical problems. Insufficient work has been submitted to allow credit in every criteria.

Detailed assessment criteria

Criterion 1: Capture

1. Capture		
MICROPHONE PLACEMENT AND CLARITY OF SIGNAL	6	Fully considered choice and placement of microphones to produce a clear, focused capture of all tracks. Good depth of field.
	4–5	Appropriate choice and placement of microphones. Minor inconsistencies on one or two tracks.
	2–3	Some appropriate choices of microphone. Some poor positioning resulting in an inconsistency of line.
	0–1	Little evidence of appropriate microphone choice and/or placement. Unacceptable lack of clarity within many parts.
NOISE AND DISTORTION	5	Excellent signal-to-noise ratio. No noise or distortion.
	3–4	Slight noise or occasional clipping, but not intrusive.
	2	Some intrusive noise and/or distortion. Inappropriate gain and level setting.
	0–1	Unacceptably noisy and poorly made recording.

Criterion 2: Processing

2. Processing		
MANAGEMENT OF EQ	6	Excellent, without inappropriate constriction or exaggeration.
	4–5	Mainly good — slight EQ errors on some tracks.
	2–3	Inconsistent use of EQ — lack of attention to EQ on some tracks detract from the overall recording
	0–1	Limited or inappropriate use of EQ.
MANAGEMENT OF DYNAMICS	6	Excellent, appropriate to the style of music. Compression has been used where appropriate to good musical effect.
	4–5	Mainly good, but some over-compression or one or two tracks do not sit well in the mix due to lack of compression.
	2–3	Inconsistently applied dynamic processing — some intrusive misjudgements.
	0–1	Limited or no use of dynamic processing. Dynamics are detrimental to the music.
FX/ AMBIENCE	6	Excellent, creative use of stylistically appropriate effects.
	4–5	Well controlled use of appropriate effects.
	2–3	Some inconsistency in application of effects processing
	0–1	Unacceptably dry, reverberant or uncontrolled use of effects processing.

Criterion 3: Mixing

3. Mixing			
BALANCE AND BLEND	6	Consistently well balanced and effectively blended across all parts of the mix.	
	4–5	Most tracks are well balanced. Some minor slips on one or two parts. Some effective blending of sounds.	
	2–3	Inconsistent balance. Important parts may be masked. Some unsuccessful blends.	
	0–1	Poorly balanced. Detrimental to the musical outcome.	
USE OF STEREO FIELD	5	Creative, musically appropriate use of stereo field.	
	3–4	Mainly good use of stereo field, but with minor inconsistencies	
	2	Inappropriate or inconsistent use of stereo field.	
	0–1	Little or no use of stereo field or significant misjudgements in panning.	

1.9 Assessment criteria for Task 1C: Creative Sequenced Arrangement

1	Method of marking	Each piece of work is marked according to both the holistic assessment criterion and the detailed assessment criteria. Holistic marking is used to ensure that the total mark derived from the other detailed assessment criteria is a true overall reflection of the standard of the student's work. If the holistic mark selected does not match the total of the detailed assessment criteria, the mark for each detailed criterion and/or the holistic mark must be reconsidered until a single mark appropriate for the work is identified.
2	Order in which the assessment criteria will be applied	Either the holistic assessment or the detailed assessment criteria may be applied first. The holistic criterion is given first below.
3	Compulsory and optional assessment criteria for arrangements	The detailed assessment criteria will consist of **three** compulsory criteria plus **three** optional criteria. **Compulsory criteria:** 1. Use of Stimulus 2. Style/Coherence 3. Use of Music Technology **Optional criteria** (**three** are selected from the following): 4. Melody 5. Harmony 6. Rhythm 7. Texture and Instrumentation 8. Form/Structure.

4	Selecting optional assessment criteria	The examiner will choose the optional assessment criteria that work to the student's best advantage.
5	Reconciling holistic and detailed marking	The examiner will reconcile the outcomes of holistic and detailed marking.

Holistic assessment criterion

Holistic		
36–40	Outstanding	Impressive and imaginative in style, ideas, development and handling of music technology. Displays a clear and intuitive understanding of the chosen style. Sense of musical wholeness — no passage sub-standard.
31–35	Excellent	Convincing throughout in style, ideas, development and handling of music technology. Makes excellent use of the stimulus within the chosen style. Any errors and/or misjudgements do not detract from a successful piece.
26–30	Good	Convincing for most of the time in style, ideas, development and handling of music technology. Good control of arrangement techniques. Some errors and/or misjudgements, but too few to have a big impact.
21–25	Competent	Generally secure in style and ideas and handling of music technology, but development may be limited. Some control of a more narrow range of arrangement techniques. Some errors and misjudgements, but the piece still has some direction and flow.
16–20	Adequate	A serious attempt to create an arrangement based on the chosen stimulus and style. Errors, misjudgements and technical problems begin to be intrusive, but much of the piece still holds together.
11–15	Basic	Inconsistent/unsophisticated handling of style, ideas and music technology. Basic use of arrangement techniques. Errors, misjudgements and technical problems are intrusive.
6–10	Limited	Positive features are few. A few encouraging signs, but considerable difficulties — a weak end product in most areas. Perhaps under the required length.
0–5	Poor	Positive features are heavily outweighed by errors, misjudgements and technical problems. Insufficient work has been submitted to allow credit in every criteria.

Detailed assessment criteria

Criterion 1: Use of Stimulus (compulsory)

Use of Stimulus (compulsory)	
6	Makes imaginative use of the stimulus with extensive and convincing development.
4–5	Makes good use of the stimulus material, developing it in a logical but mostly convincing fashion.
2–3	Makes some use of the stimulus material with little development or with several unconvincing passages.
0–1	Limited use of the stimulus or simple repetition of the given material. Arrangement too short.

Criterion 2: Style/Coherence (compulsory)

Style/Coherence (compulsory)	
6	Excellent and consistent — appropriate to the chosen style. There is a sense of flow, direction and coherence throughout the arrangement.
4–5	A consistent sense of style. Musical ideas are coherent with a mostly appropriate blend of unity and diversity.
2–3	Some inconsistency of style resulting in a lack of coherence, or coherent but not appropriate to the chosen style. The arrangement may be overly repetitive or have a surfeit of ideas.
0–1	Limited sense of style and coherence. Does not reflect the chosen style.

Criterion 3: Use of Music Technology (compulsory)

Use of Music Technology (compulsory)	
10	Well chosen timbres, edited to suit the style. The recording is musically balanced including effective use of the stereo field with musically shaped dynamics, articulation and phrasing throughout.
8–9	Well chosen timbres. The recording is well balanced including good use of the stereo field with some dynamic shaping, articulation and phrasing.
6–7	Appropriate timbres. The recording is mostly well balanced including some use of the stereo field with dynamic contrasts and some articulation and phrasing.
4–5	Timbre choices are mostly appropriate. Some inconsistencies in sense of balance and use of stereo field. Some dynamic contrasts present with some inconsistent articulation and/or phrasing.
2–3	Some inappropriate choices of timbre. Inconsistent sense of balance with little use of stereo field. Little or inappropriate dynamic contrast. Little articulation and/or phrasing.
0–1	Poor choice of timbre with limited sense of balance, no dynamic contrasts and little or no editing for articulation and phrasing.

Criteria 4–6 will only be used to assess melodies, harmonies and rhythms written by the candidate in addition to that provided in the stimulus or arrived at through significant manipulation of the stimulus material.

Criterion 4: Melody (optional)

Melody (optional)	
6	Excellent and imaginative with a strong sense of melodic flow as appropriate to the style.
4–5	A good melodic sense. Melodies have shape and style.
2–3	Melodies are stiff or formulaic or display inconsistency in shape or flow.
0–1	Limited sense of melodic shape. Melodies lack direction and structure or are inappropriate to the style.

Criterion 5: Harmony (optional)

Harmony (optional)	
6	Excellent and imaginative and appropriate to the style.
4–5	Appropriately chosen harmonies with few misjudgements.
2–3	Some inconsistency in harmonic choices. May be functional but uninteresting.
0–1	Limited control of harmony — detrimental to the music.

Criterion 6: Rhythm (optional)

Rhythm (optional)	
6	Excellent and imaginative use of rhythmic elements.
4–5	Appropriate use of rhythms with some development as appropriate to the style.
2–3	Some lack of rhythmic variety or a surfeit of rhythmic ideas.
0–1	Limited use of rhythmic elements.

Criterion 7: Texture and Instrumentation (optional)

Texture and Instrumentation (optional)	
6	Imaginative and idiomatic use of texture and instrumentation.
4–5	Good use of texture to create interest. Appropriate use of instrumental resources.
2–3	Some inconsistencies in use of texture and instrumental resources or insufficient textural contrast.
0–1	Limited or inappropriate use of texture and instrumentation.

Criterion 8: Form/structure (optional)

Form/Structure (optional)	
6	Excellent and imaginative organisation of musical ideas.
4–5	Musical ideas are presented with a sense of direction and coherence as appropriate to the style with few misjudgements.
2–3	Some misjudgements in the organisation of musical ideas. May be excessively unpredictable or overly repetitive.
0–1	Limited or inappropriate organisation of musical ideas.

1.10 Assessment criteria for the logbook

Assessment criteria for Question 9	
10	Substantial and thorough. Perceptive and accurate references to the development of the chosen stimulus with reference to at least two of the musical elements. QWC: Very few syntactical and/or spelling errors may be found but these will not detract from the overall coherence. Excellent organisation and planning. All the skills required to produce convincing writing are in place.
8–9	Detailed and accurate. Detailed and accurate references to the development of the chosen stimulus with reference to at least two of the musical elements. QWC: Few syntactical and/or spelling errors may be found but these will not detract from the overall coherence. Good organisation and planning. Almost all of the skills required to produce convincing writing are in place.
6–7	Mostly accurate. There is some detail relating to how the stimulus has been developed with reference to at least two of the musical elements. There are one or two inaccuracies. QWC: Some syntactical and/or spelling errors may be found but overall the writing is coherent. Some organisation and clarity. Most of the skills needed to produce convincing writing are in place.
4–5	Little detail. Most of the comments relating to how the stimulus has been developed are accurate but lacking in detail. Reference has been made to at least two of the musical elements. QWC: Some syntactical and/or spelling errors are present. The writing will display some degree of organisation and clarity but this will not be sustained throughout the response. Some of the skills needed to produce convincing writing are in place.
2–3	Inaccurate. Many of the comments relating to how the stimulus has been developed are inaccurate. There is little detail in the response. QWC: Frequent syntactical and/or spelling errors are present. The writing contains passages which lack clarity and organisation. A few of the skills needed to produce convincing writing are present.
0–1	Limited. A limited response with very few accurate references to use of the stimulus and lacking in detail. QWC: Frequent syntactical and/or spelling errors are present. The writing lacks clarity and organisation. Few of the skills needed to produce convincing writing are present.

Assessment criteria for Question 10	
10	Substantial and thorough. Perceptive and accurate references to the most important features of the chosen style with a highly detailed description as to how these have been used in the arrangement. QWC: Very few syntactical and/or spelling errors may be found but these will not detract from the overall coherence. Excellent organisation and planning. All the skills required to produce convincing writing are in place.
8–9	Detailed and accurate. Detailed and accurate references to the most important features of the chosen style with a detailed description as to how these have been used in the arrangement. QWC: Few syntactical and/or spelling errors may be found but these will not detract from the overall coherence. Good organisation and planning. Almost all of the skills required to produce convincing writing are in place.
6–7	Mostly accurate. There is some detail in the references to the main features of the chosen style and in the description as to how they have been used in the arrangement, but there are one or two inaccuracies. QWC: Some syntactical and/or spelling errors may be found but overall the writing is coherent. Some organisation and clarity. Most of the skills needed to produce convincing writing are in place.
4–5	Little detail. There are some references to some of the main features of the chosen style with some accurate points made as to how these are used in the arrangement. There is little detail in the response. QWC: Some syntactical and/or spelling errors are present. The writing will display some degree of organisation and clarity but this will not be sustained throughout the response. Some of the skills needed to produce convincing writing are in place.
2–3	Inaccurate. Many of the references to the main features of the chosen style are inaccurate. There are a few connections made between these features and the arrangement. There is little detail in the response. QWC: Frequent syntactical and/or spelling errors are present. The writing contains passages which lack clarity and organisation. A few of the skills needed to produce convincing writing are present.
0–1	Limited. A limited response with very few accurate references to the main features of the chosen style and little or no identification of these features in the arrangement. QWC: Frequent syntactical and/or spelling errors are present. The writing lacks clarity and organisation. Few of the skills needed to produce convincing writing are present.

Unit 2 Listening and Analysing
AS compulsory unit   Externally assessed

2.1 Unit description

1 Overview

This unit provides students with an opportunity to study the styles most common in popular music. Students will have the opportunity to demonstrate this knowledge using aural discrimination skills.

Students are required to study the development of popular music styles from 1910 through to the present day, of which two Special Focus styles will be selected each year.

2.2 Assessment information

1 Exam overview

The assessment of this unit is through a 1 hour 45 minute examination paper set and marked by Edexcel.

There are two Sections in the examination paper and students must complete both.

Students will undertake a listening and analysis examination which consists of a series of musical extracts provided on an audio CD together with a question paper.

The style of questions will include multiple choice questions, short answer questions and questions requiring extended prose in *Section B*. Questions may also include diagrams, illustrations and photographs, charts, grids or standard musical notation which students may be required to refer to, interpret, or complete. The questions will assess the knowledge and understanding of both Areas of Study 1 and 2.

2 Structure of exam paper

The examination paper has two sections, A and B and will be structured as follows:

Section A (40 marks)

- Questions 1–4 will test students' aural perception of musical characteristics and features of the given extracts, including relevant technological aspects. The extracts will be drawn from *Area of Study 2: Popular musical styles since 1910*. These questions will be equally weighted.

Section B (40 marks)

- Questions 5 and 6 will be drawn from the two Special Focus styles as detailed above, testing both students' aural perception and also their wider understanding and knowledge of the style/genre. The two questions will be equally weighted.

3 Resources

Students will each have access to the musical extracts and be allowed to listen to the examples as many times as they wish. They will need access to an individual CD player (with a time display) and high quality headphones. This could be the CD drive or media player of a computer.

Provided students are isolated from each other within the centre, and also prevented from contacting students at other centres, it is permissible to run the examination several times on the date of the examination to make access to resources easier.

2.3 Unit content

What students need to learn

1 **Section A: Popular Music Styles (40 marks)**

Students are required to study the development of popular music styles from 1910 through to the present day. This is not intended to be a comprehensive and in-depth study of every popular, jazz or rock music style but an overview of the main styles and trends during the development of popular music.

Students are expected to have an understanding of these styles and an overview of:

- the principal fingerprints of the style in terms of melodic, harmonic, rhythmic and structural elements, the key features of its instrumentation and arrangement and the technological processes of its recording and production

- the main artists, performers, composers, producers and arrangers.

**2 Section B:
Special Focus
Styles
(40 marks)**

Two special focus styles will be selected each year for more in depth study. In addition to the main fingerprints of the style, students will be expected to have an extended knowledge and understanding of context, which might include:

- the origins and development of the style, including the social and cultural conditions that might have influenced this development

- specific musical and technological characteristics associated with the style — melody, harmony, structure, instrumentation, arrangement, production etc

- the influence of the style on other artists.

The following special focus styles will be examined in the year stated. Students must cover these special focus styles during the course ready for when they sit their examination:

Examination year 2009 and 2013:

Rock and roll
Rap and hip hop

Examination year 2010 and 2014:

Reggae
Heavy rock

Examination year 2011 and 2015:

Soul
Indie rock

Examination year 2012 and 2016:

Punk and new wave
Club dance

3.1 Unit description

1	**Music Technology practical unit**	Unit 3 builds on skills acquired in Unit 1 and extends these to include a composition task. It involves detailed study of *Area of Study 3: The Development of Technology-based Music*. Students carry out the work for this unit under controlled conditions.
2	**Three tasks**	Students must complete three tasks which together make the Music Technology Portfolio 2:

- Task 3A: Sequenced Integrated Performance

- Task 3B: Multi-track Recording

- Task 3C: Composing using Music Technology.

Each task will be submitted as a designated track on the Music Technology Portfolio 2.

3	**Logbook**	Students will also submit a logbook which will provide information on the resources used in each task. A copy of the logbook can be found in *Appendix 2*.

3.2 Assessment information

1	**Task 3A: Sequenced Integrated Performance (40 marks)**	Students will produce a sequenced performance based on a recording of one piece of music from a list of two prescribed by Edexcel. Neither the recording nor a skeleton score of the piece will be provided by Edexcel. Centres must purchase sufficient copies of the recording for their students. Students may produce their own skeleton scores or lead sheets to assist them in sequencing their chosen piece but they are free to manage the process of listening and realising as they see fit. Any forms of notation produced by students need not be submitted and will not be assessed. Students must produce an accurate musical realisation through sequencing of their chosen piece, shaping, editing and mixing MIDI and audio data accordingly, with the help of appropriate software.

Task 3A differs from Task 1A in requiring a live audio recording of the lead vocal to be integrated with the other sequenced tracks. Students may record up to a maximum of two further tracks if desired in addition to the vocal track.

2	**Task 3B: Multi-track Recording (40 marks)**	Students will select one recording topic from a choice of two (as shown in *Section 2.4*). They will choose a piece of music lasting 3–5 minutes which relates to their chosen topic and make a recording of it. The performance recorded must be played and sung live, without any MIDI sequenced performance. The recording should be high-quality, with careful attention paid to the efficient capture, processing and mixing of musical information.
		Task 3B differs from Task 1B in requiring more expert management of the recording process. It will involve a minimum of 12 tracks and a maximum of 24 tracks, and a minimum of eight tracks captured using microphones. According to the topic chosen, students must use at least four acoustic/orchestral or percussion instruments.
3	**Task 3C: Composing Using Music Technology (40 marks)**	Students will create an original composition based upon a brief supplied by Edexcel. Students will choose one of three published briefs. The composition should demonstrate a creative approach to the use of music technology in composition, and will involve employing a range of sound sources and editing techniques to achieve a musical outcome.
4	**Logbook**	Students must complete a logbook detailing the equipment used for all three tasks. (There are no marks available for completing the logbook, but student's work cannot be assessed if this is not completed.)
		A copy of the logbook can be found in *Appendix 2*.
5	**Submission process**	Each student's submissions for Tasks 3A, 3B and 3C are to be recorded on one audio CD, to create the Unit 3 Portfolio. The portfolio and the logbook will be submitted to Edexcel for external assessment in the summer of the examination year.

6   Controlled conditions

Students have the following number of hours to complete the three tasks in Music Technology Portfolio 2:

- a maximum of 20 hours to complete the Sequenced Integrated Performance

- a maximum of 20 hours to complete the Multi-track Recording

- a maximum of 20 hours to complete the Composing Using Music Technology.

The hours may be divided into any number of sessions but each session must be supervised.

Supervision must take place, within the examination centre and students must work on their portfolio only in and during these hours. At other times students' work must be kept under secure conditions in the centre.

Students must not take the portfolio home or anywhere else outside the room(s) in which the controlled conditions apply.

Students' access to any instruments or computers must be monitored by the supervisor. Students must not download material from the internet, or email their work home or anywhere else outside the room(s) in which the controlled conditions apply. Back-up copies of the work must not be taken out of the room(s) in which the controlled conditions apply.

All students should be advised by their teacher that the work must be their own, and that he/she will not sign their declaration form if the work appears not to be original. All students will be required to sign the declaration form as well, stating that the work is their own.

More guidance on the management of controlled conditions is provided in the Getting Started guide.

3.3 Task 3A: Sequenced Integrated Performance

1 What students need to learn	Study for this task should include:

Study for this task should include:

- a range of popular music styles involving electronic instruments from *Area of Study 3: The Development of Technology-based Music*

- sequencing skills, including methods of data entry, the editing and manipulating of timbres and parts, using controllers, processing, and audio within the sequencer

- the sonic and timbral possibilities available through the use of a variety of sound sources (eg software instruments, virtual sound modules, sample libraries and audio samples)

- the integration of live audio recording and sequenced tracks.

2 Nature of Task 3A

Students will be required to create a sequenced performance of one of two songs set by Edexcel and linked to *Area of Study 3: The Development of Technology-based Music*, using a computer-based sequencing program and live audio equipment. The prescribed songs will involve electronic instruments and a lead vocal part.

The sequenced integrated performance must:

- be based on one of the prescribed songs

- reproduce the sound of the original recording as accurately as possible in terms of pitch and rhythm

- come as near as possible to the style and sonic palette of the original recording, by means of appropriate choices, editing and blending of available sound sources

- be a realistic musical performance, arrived at through detailed shaping, editing and mixing of MIDI and audio data, together with the programming and editing of any software instruments and/or other plug-ins used

- contain a live audio recording of the vocals (and, if the student wishes, other live audio track(s)), which must be integrated with the other sequenced tracks.

Task 3A is not an arranging task. Students are required to recreate the original track as accurately and stylistically as possible. Examiners recognise that it may not always be possible to emulate accurately all the sounds and timbres in the original recording, and will reward students who are able successfully to circumvent the limitations of the equipment available to them. However, for Task 3A (unlike 1A) the lead vocal line must be recorded as a live audio track: substituting synthesised sounds for the lead vocal is not acceptable.

Students may use a range of available sound sources and programming techniques. These could include GM soundsets, hardware/software sound modules and synthesisers, audio loops and samples, virtual studio instruments and sample libraries.

It is envisaged that students will work primarily with a computer-based workstation for Task 3A. However, the quality of the live audio track(s) is vital, and should be undertaken in a suitable recording environment. It is perfectly acceptable for the programmed tracks to be transferred to a external hard-disk recorder prior to the recording stage, but students must ensure that they are able subsequently to undertake the editing of any individual track, in order to produce an effective integration of the live and programmed material. Each year Edexcel will prescribe a choice of two songs for Task 3A.

| 3 | The stimulus | Each year Edexcel will prescribe a choice of two songs for Task 3A. This information will be communicated to centres in the September in the academic year of examination. |

| 4 | Submission | The finished recording must be submitted as Track 1 on the Music Technology Portfolio 2 audio CD. |

3.4 Task 3B: Multi-track Recording

1	What students need to learn

Study for this task should include:

- capturing, processing and mixing musical performances to make high-quality recordings of acoustic/orchestral or percussion instruments, according to the topic chosen

- recording between 12 and 24 live tracks, using close-mic and overdubbing

- balanced use of microphones and direct-inject (DI) capture

- music from *Area of Study 3: The Development of Technology-based Music*

- planning, managing and directing recording sessions of greater complexity than those required for Unit 1.

2	Choice of topics

Students must choose one of the following two topics:

Either

Topic A: Recording Acoustic and/or Orchestral Instruments

In their recording task for this unit, students must use at least four acoustic and/or orchestral instruments. If they wish, they may also use electronic instruments. These may be combined with electronic/amplified instruments or more acoustic and orchestral instruments or vocal.

Or

Topic B: Recording Percussion Instruments

In their recording task for this unit students must use at least four percussion instruments. These may be Latin, tuned, untuned, orchestral or world, but a standard drum set counts as one instrument.

These four percussion instruments may be combined with any other instruments (electronic/amplified/acoustic/orchestral) or vocals.

3	**Nature of Task 3B**	Students will present for assessment a recording of a piece of music of their own choice relevant either to Topic A or Topic B. Students must record a piece of music that is commercially available, or an accepted rock/pop/jazz standard.

The recording should:

- last between 3 and 5 minutes

- use a minimum of 12 and a maximum of 24 tracks

- contain a balanced use of close-mic and direct-inject (DI) capture

- have a minimum of eight tracks captured using microphones

- make use of overdub techniques

- use only live musicians, and contain no MIDI sequenced performance

- involve a minimum of four acoustic and/or orchestral instruments if Topic A is offered, or a minimum of four percussion instruments if Topic B is offered

- be a noise-free stereo production, with use of appropriate effects.

4	**Responsibility**	During the recording sessions, the student must be the sole person in control of the recording equipment (ie mixing desk). The student can retake the recording as many times as practical in the time available. The recordings must be made under the supervision of the teacher, and may not be made under professional guidance in commercial studios.

5	**Submission**	The finished recording must be submitted as Track 2 on the Music Technology Portfolio 2 audio CD.

3.5 Task 3C: Composing Using Music Technology

1 What students need to learn

Study for this task should include:

- a programme of compositional study encompassing a range of styles and genres. These might include music from *Area of Study 3: The Development of Technology-based Music*. They might also include Western classical styles, particularly those of the 20th century, music for film, television and theatre, and relevant world music styles

- learning how to compose to a composition brief. Students will have the choice of three different composition briefs set by Edexcel

- learning how to compose for whatever forces are selected by the student for his/her chosen brief. An imaginative and wide-ranging use of music technology resources must be central to each submission, but students may use a range of resources including amplified, electronic and virtual instruments, samples, MIDI, acoustic and orchestral instruments and voices

- learning how to develop musical ideas within chosen forms and structures. Students should understand the principles of rhythmic, melodic and harmonic construction necessary to make musical compositions coherent, satisfying and fit for purpose.

2 Nature of Task 3C

Using music technology, students will be required to compose a piece based on one of three briefs published by Edexcel. Pieces for this task must be 3–4 minutes long, although a brief may specify duration within this range more precisely.

Students may use a range of available sound sources and programming techniques. These could include GM soundsets, hardware/software sound modules and synthesisers, audio loops and samples, virtual studio instruments and sample libraries. Acoustic and orchestral instruments and voices may be included in work submitted for Task 3C.

Compositions must be for at least six tracks or six instruments and/ or voices.

3	The composition briefs	Each year Edexcel will prescribe a choice of three composition briefs for Task 3C. The briefs will be published in the September of the academic year of examination.

Between them, the briefs will give students a choice of composing tasks which may include:

- music for film or television
- electro-acoustic music (such as an electronic soundscape)
- popular song (with or without vocals, and perhaps, but not necessarily, for the stage).

4	Submission	The finished composition must be submitted as Track 3 of the Music Technology Portfolio 2 audio CD.

3.6 Logbook

A copy of the logbook can be found in *Appendix 2*.

3.7 Assessment criteria for Task 3A: Sequenced Integrated Performance

1	Method of marking	Each piece of work is marked according to both the holistic assessment criterion and the detailed assessment criteria. Holistic marking is used to ensure that the total mark derived from the other detailed assessment criteria is a true overall reflection of the standard of the student's work. If the holistic mark selected does not match the total of the detailed assessment criteria, the mark for each detailed criterion and/or the holistic mark must be reconsidered until a single mark appropriate for the work is identified.
2	Order in which the assessment criteria will be applied	Either the holistic assessment or the detailed assessment criteria may be applied first. The holistic criterion is given first below.

Holistic assessment criterion

Holistic		
36–40	Outstanding	A highly accurate sequence. Imaginative work displaying a high level of control and musicality.
		Sense of musical wholeness — the whole piece has been sequenced to a high standard.
31–35	Excellent	Convincing throughout in terms of accuracy, musicality and control.
		Any errors and/or misjudgements do not detract from a successful sequence.
26–30	Good	Convincing for most of the time in terms of accuracy, musicality and control.
		Some errors and/or misjudgements, but too few to have a big impact.
21–25	Competent	Generally secure in terms of accuracy, musicality and control.
		Some errors and/or misjudgements, but the performance still has a sense of direction and fluency.
16–20	Adequate	A serious attempt but some insecurity and inconsistency in terms of accuracy, musicality and control.
		Errors, misjudgements and technical problems begin to be intrusive, but the piece still holds together.
11–15	Basic	The accuracy of the data input is inconsistent. There is a lack of musicality and control.
		Errors, misjudgements and technical problems are intrusive.
6–10	Limited	Positive features are few.
		A few encouraging signs, but considerable difficulties — a weak end product in most areas. The submission may be incomplete.
0–5	Poor	Positive features are heavily outweighed by errors, misjudgements and technical problems. Insufficient work has been submitted to allow credit in every criteria.

Detailed assessment criteria

Criterion 1: Realisation of Pitch and Rhythm

1. Realisation of Pitch and Rhythm		
PITCH	6	Excellent accuracy of pitch.
	4–5	A few small slips which do not detract from the overall performance.
	3	Several errors (such as missed accidentals).
	2	Some significant intrusive errors and/or omissions, with unmusical effect.
	0–1	Limited accuracy, seriously compromising the performance.
RHYTHM	6	Excellent accuracy of rhythm. A musical performance.
	4–5	A few small slips which do not detract from the overall performance. A rhythmically accurate, but mechanical sequence.
	3	Some audible errors (such as poor rhythmic ensemble between parts).
	2	Some significant obtrusive errors and/or omissions, with unmusical effect.
	0–1	Limited accuracy, seriously compromising the performance.

Criterion 2: Choice of Timbre and Mix

2. Choice of Timbre and Mix		
TIMBRE	4	Well-chosen timbres — timbres have been edited as appropriate to suit the given stimulus material
	3	Appropriate choice of timbres, but no further editing to suit stimulus.
	2	Partially successful choice of timbres.
	0–1	Limited success in choosing appropriate timbres.
BALANCE/PAN	4	A musically balanced mix, faithful to the original. Effective placement in the stereo field. Audio tracks are well blended and balanced with sequenced parts.
	3	Mostly well balanced with some placement in the stereo field. Audio tracks sit well in the mix.
	2	Some unsuccessful blends or masking of important parts. Some misjudgements in stereo placement. Audio tracks do not always blend well with sequenced parts.
	0–1	Little sense of balance or blend. Little or no placement in the stereo field/serious misjudgements in panning. Audio tracks feel separate to sequenced parts.

Criterion 3: Musicality — Dynamics, Articulation and Phrasing

3. Musicality — Dynamics, Articulation and Phrasing		
DYNAMICS	4	Detailed and musically effective dynamics throughout. Some dynamic shaping as appropriate to instrumentation.
	3	Good overall dynamic contrasts, but little or no shaping.
	2	Some attempts to create dynamic contrasts, but some inconsistencies or misjudgements.
	0–1	Mechanical, unmusical and/or erratic. Limited attempt to create dynamic contrasts.
ARTICULATION AND PHRASING	4	Detailed and musically effective articulation and phrasing throughout.
	3	Generally effective articulation and phrasing.
	2	Some attempts to create articulation and phrasing, but some inconsistencies or misjudgements.
	0–1	Mechanical, unmusical and/or erratic. Little attention to articulation and phrasing.

Criterion 4: Music Technology Skills and Capture of Live Audio

4. Music Technology Skills		
STYLE AND CREATIVITY	4	Excellent sense of style including musical and controlled use of tempo shaping and effects as appropriate. Any fills or solos are well executed and stylistic. A musical sequence.
	3	A consistent sense of style with some attention to musical detail resulting in a generally successful sequence.
	2	Some inconsistencies in the application of tempo shaping and effects or a mechanical approach resulting in a more basic sequence.
	0–1	Limited sense of style with little attention to musical detail. A mechanical sequence.
CAPTURE OF LIVE AUDIO	8	Audio tracks are well captured with well managed dynamics and EQ as appropriate to the style.
	6–7	Audio tracks are mostly well captured with minor slips in dynamics or EQ.
	4–5	Appropriate mic choice, but some areas of inconsistency — may display insufficient attention to dynamics or EQ, or may have some clipping.
	2–3	Wrong mic choice/poor positioning. One or more areas display significant weaknesses.
	0–1	Unacceptable lack of clarity. Little or no attention to dynamics and EQ. A noisy recording.

3.8 Assessment criteria for Task 3B: Multi-track Recording

1	Method of marking	Each piece of work is marked according to both the holistic assessment criterion and the detailed assessment criteria. Holistic marking is used to ensure that the total mark derived from the other detailed assessment criteria is a true overall reflection of the standard of the student's work. If the holistic mark selected does not match the total of the detailed assessment criteria, the mark for each detailed criterion and/or the holistic mark must be reconsidered until a single mark appropriate for the work is identified.
2	Order in which the assessment criteria will be applied	Either the holistic assessment or the detailed assessment criteria may be applied first. The holistic criterion is given first below.

Holistic assessment criterion

Holistic		
36–40	Outstanding	An impressive recording in which all parts are clear, well balanced, successfully processed and mixed. Sense of wholeness — all aspects of the recording are of a high standard.
31–35	Excellent	Convincing throughout in terms of clarity, processing and mixing. Any errors and/or misjudgements do not detract from a successful recording.
26–30	Good	Convincing for most of the time in terms of clarity, processing and mixing. Some errors and/or misjudgements, but too few to have a big impact.
21–25	Competent	Generally secure in terms of clarity, processing and mixing. Some errors and/or misjudgements, but the recording is still broadly successful.
16–20	Adequate	A serious attempt but some insecurity and inconsistency in terms of clarity, processing and mixing. Errors, misjudgements and technical problems begin to be intrusive, but the recording still has some positive features.
11–15	Basic	There are some significant problems in terms of clarity, processing and mixing. Errors, misjudgements and technical problems are intrusive.
6–10	Limited	Positive features are few. A few encouraging signs, but considerable difficulties — a weak end product in most areas. The submission may be incomplete.
0–5	Poor	Positive features are heavily outweighed by errors, misjudgements and technical problems. Insufficient work has been submitted to allow credit in every criteria.

Detailed assessment criteria

Criterion 1: Capture

1. Capture		
MICROPHONE PLACEMENT AND CLARITY OF SIGNAL	6	Fully considered choice and placement of microphones to produce a clear, focused capture of all tracks. Good depth of field.
	4–5	Appropriate choice and placement of microphones. Minor inconsistencies on one or two tracks.
	2–3	Some appropriate choices of microphone. Some poor positioning resulting in an inconsistency of line.
	0–1	Little evidence of appropriate microphone choice and/or placement. Unacceptable lack of clarity within many parts.
NOISE AND DISTORTION	5	Excellent signal-to-noise ratio. No noise or distortion.
	3–4	Slight noise or occasional clipping, but not intrusive.
	2	Some intrusive noise and/or distortion. Inappropriate gain and level setting.
	0–1	Unacceptably noisy and poorly made recording.

Criterion 2: Processing

2. Processing		
MANAGEMENT OF EQ	6	Excellent, without inappropriate constriction or exaggeration.
	4–5	Mainly good — slight EQ errors on some tracks.
	2–3	Inconsistent use of EQ — lack of attention to EQ on some tracks detract from the overall recording
	0–1	Limited or inappropriate use of EQ.
MANAGEMENT OF DYNAMICS	6	Excellent, appropriate to the style of music. Compression has been used where appropriate to good musical effect.
	4–5	Mainly good, but some over-compression or one or two tracks do not sit well in the mix due to lack of compression.
	2–3	Inconsistently applied dynamic processing — some intrusive misjudgements.
	0–1	Limited or no use of dynamic processing. Dynamics are detrimental to the music.
FX/ AMBIENCE	6	Excellent, creative use of stylistically appropriate effects.
	4–5	Well controlled use of appropriate effects.
	2–3	Some inconsistency in application of effects processing
	0–1	Unacceptably dry, reverberant or uncontrolled use of effects processing.

Criterion 3: Mixing

3. Mixing			
BALANCE AND BLEND	6	Consistently well balanced and effectively blended across all parts of the mix.	
	4–5	Most tracks are well balanced. Some minor slips on one or two parts. Some effective blending of sounds.	
	2–3	Inconsistent balance. Important parts may be masked. Some unsuccessful blends.	
	0–1	Poorly balanced. Detrimental to the musical outcome.	
USE OF STEREO FIELD	5	Creative, musically appropriate use of stereo field.	
	3–4	Mainly good use of stereo field, but with minor inconsistencies	
	2	Inappropriate or inconsistent use of stereo field.	
	0–1	Little or no use of stereo field or significant misjudgements in panning.	

3.9 Assessment criteria for 3C: Composing Using Music Technology

1	**Method of marking**	Each piece of work is marked according to both the holistic assessment criterion and the detailed assessment criteria. Holistic marking is used to ensure that the total mark derived from the other detailed assessment criteria is a true overall reflection of the standard of the student's work. If the holistic mark selected does not match the total of the detailed assessment criteria, the mark for each detailed criterion and/or the holistic mark must be reconsidered until a single mark appropriate for the work is identified.
2	**Order in which the assessment criteria will be applied**	Either the holistic assessment or the detailed assessment criteria may be applied first. The holistic criterion is given first below.

3	Compulsory and optional assessment criteria for compositions	The detailed assessment criteria will consist of **four** compulsory criteria plus **three** optional criteria.
		Compulsory criteria:
		1. Responding to Set Brief
		2. Style/Coherence
		3. Manipulation of Sounds
		4. Quality of Recorded Submission
		Optional criteria (**three** are selected from the following):
		5. Melody
		6. Harmony
		7. Rhythm
		8. Texture
		9. Form/Structure
4	Selecting optional assessment criteria	The examiner will choose the optional assessment criteria that work to the student's best advantage.
5	Reconciling holistic and detailed marking	The examiner will reconcile the outcomes of holistic and detailed marking.

Holistic assessment criterion

Holistic		
36–40	Outstanding	Impressive and imaginative in style, ideas, development and handling of music technology.
		Complete control of compositional methods and techniques used.
		Sense of musical wholeness — no passage sub-standard.
31–35	Excellent	Convincing throughout in style, ideas, development and handling of music technology.
		Excellent control of compositional methods and techniques used.
		Any errors and/or misjudgements do not detract from a successful piece.
26–30	Good	Convincing for most of the time in style, ideas, development and handling of music technology.
		Good control of compositional methods and techniques.
		Some errors and/or misjudgements, but too few to have a big impact.
21–25	Competent	Generally secure in style and ideas and handling of music technology, but development may be limited.
		Some control of a more narrow range of compositional methods and techniques.
		Some errors and misjudgements, but the piece still has some direction and flow.
16–20	Adequate	A serious attempt but some inconsistent/unsophisticated handling of style, ideas and music technology.
		Some effective use of a narrow range of compositional methods and techniques.
		Errors, misjudgements and technical problems begin to be intrusive, but much of the piece still holds together.
11–15	Basic	Inconsistent/unsophisticated handling of style, ideas and music technology.
		Basic use of compositional methods and techniques.
		Errors, misjudgements and technical problems are intrusive.
6–10	Limited	Positive features are few.
		A few encouraging signs, but considerable difficulties — a weak end product in most areas. Perhaps under the required length.
0–5	Poor	Positive features are heavily outweighed by errors, misjudgements and technical problems. Insufficient work has been submitted to allow credit in every criteria.

Detailed assessment criteria

Criterion 1: Responding to Set Brief (compulsory)

Responding to Set Brief (compulsory)	
6	Fully and imaginatively reflects all elements of the brief.
4–5	Most aspects of the brief have been successfully addressed.
2–3	A few of the elements of the brief have been reflected.
0–1	Limited response to the brief. Composition too short.

Criterion 2: Style/Coherence (compulsory)

Style/Coherence (compulsory)	
6	Excellent and consistent sense of style. Ideas have been imaginatively developed demonstrating a sense of flow, direction and coherence throughout the composition.
4–5	A consistent sense of style. Musical ideas are coherent and have been developed with a mostly appropriate blend of unity and diversity.
2–3	Some inconsistency of style resulting in a lack of coherence. Some insufficient development. The composition may be overly repetitive or have a surfeit of ideas.
0–1	Limited sense of style and coherence. Insufficient development of ideas.

Criterion 3: Manipulation of Sounds (compulsory)

Manipulation of Sounds (compulsory)	
6	Excellent use of sound shaping and/or effects to create an imaginative and coherent sonic palette.
4–5	Successful use of sound shaping and/or effects as appropriate to the style.
2–3	Some inconsistency in the use of effects/restricted use of technology to manipulate sound.
0–1	Limited or inappropriate manipulation of sound/use of effects.

Criterion 4: Quality of Recorded Submission (compulsory)

Quality of Recorded Submission (compulsory)	
4	A well presented, high quality recording.
3	A mostly well presented recording with few flaws.
2	Some inconsistencies in the quality of the recording. Insufficient attention to detail.
0–1	A poorly presented recording with little attention to detail.

Criterion 5: Melody (optional)

Melody (optional)	
6	Excellent and imaginative with a strong sense of melodic flow as appropriate to the style.
4–5	A good melodic sense. Melodies have shape and style.
2–3	Melodies are stiff or formulaic or display inconsistency in shape or flow.
0–1	Limited sense of melodic shape. Melodies lack direction and structure or are inappropriate to the style.

Criterion 6: Harmony (optional)

Harmony (optional)	
6	Excellent and imaginative and appropriate to the style.
4–5	Appropriately chosen harmonies with few misjudgements.
2–3	Some inconsistency in harmonic choices. May be functional but uninteresting.
0–1	Limited control of harmony — detrimental to the music.

Criterion 7: Rhythm (optional)

Rhythm (optional)	
6	Excellent and imaginative use of rhythmic elements.
4–5	Appropriate use of rhythms with some development as appropriate to the style.
2–3	Some lack of rhythmic variety or a surfeit of rhythmic ideas.
0–1	Limited use of rhythmic elements.

Criterion 8: Texture (optional)

Texture (optional)	
6	Excellent, imaginative and coherent throughout.
4–5	Good use of texture to create interest in the piece with few misjudgements.
2–3	Some textural inconsistencies or insufficient contrast.
0–1	Limited or inappropriate use of texture.

Criterion 9: Form/Structure (optional)

Form/Structure (optional)	
6	Excellent and imaginative organisation of musical ideas.
4–5	Musical ideas are presented with a sense of direction and coherence as appropriate to the style with few misjudgements.
2–3	Some misjudgements in the organisation of musical ideas. May be excessively unpredictable or overly repetitive.
0–1	Limited or inappropriate organisation of musical ideas.

4.1 Unit description

Students will be expected to demonstrate their knowledge of music and the principles of music technology through a series of written commentaries, manipulations and production tasks using material on an examination paper and recorded on an audio CD.

4.2 Assessment information

1 Exam focus

This assessment will take the form of a 2-hour examination.

There are two sections in the examination paper and students have to complete both.

Each student will have an audio CD, which will contain a series of music files to be imported into music production software. Each student will also have an examination paper which will include some or all of the CD tracks notated as conventional staff notation, editing grids or numerical data.

Students will be required to review the materials, commenting on musical elements and technological processes, identifying mistakes and discrepancies and correcting them and, finally, producing a stereo mix. The tasks may involve adding and editing MIDI data, and may involve vocal track(s).

The final mix will consist of four tracks totalling, approximately, one minute of music. Some of the material on the audio CD may take the form of separate sections or samples which will have to be assembled into a complete track.

- The first track will consist of a melody which may be original, a popular song or jazz standard, folk tune or film/TV theme.
- The second will consist of backing chords for keyboard(s), guitar(s), wind or string instruments.
- The third will consist of a bass line.
- The fourth will be a drum and/or percussion part.

2 Structure of exam paper

The examination paper has two sections, A and B, and will be structured as follows:

Section A (62 marks)

- Questions 1–4 will test students' musical understanding, their ability to manipulate and correct recorded music and their ability to write commentaries on technological processes.

Section B (18 marks)

- Question 5 will be a practical task involving the production of a balanced stereo mix.

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3 Resources

Students will require a good quality computer workstation with MIDI keyboard and headphones. Internet access will not be permitted during the examination.

Students will require sufficient working space to be able to operate their equipment and to write in their answer booklet.

Provided students are isolated from each other within the centre, and also prevented from contacting students at other centres, it is permissible to run the examination several times on the date of the examination to make access to resources easier.

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4 Submission

Students will be required to produce their stereo mix on an audio CD. This must be submitted with the completed answer book to Edexcel.

4.3 What students need to learn

1	Music technology in practice	Study for this unit should include the capture, mixing and processing of music and musical data, including:

- recording, importing and inputting data (including MIDI data)
- audio sequencing, sampling and editing
- MIDI sequencing and editing
- correcting technical errors
- copying, pasting and compiling tracks
- mixing, processing and burning to CD.

2	Musical elements and the principles of music technology	Study for this unit should also prepare students for its written demands which will include:

- making comparisons between musical extracts and commenting perceptively on musical features including melody, harmony, rhythm and structure using appropriate musical vocabulary
- following a skeleton score, identifying and correcting errors and discrepancies in pitch and rhythm, identifying features such as chords and cadences and notating drum patterns and riffs
- identifying and commenting perceptively on the technological features of music including its method of recording, capture or data production, techniques of audio and MIDI sequencing and sampling, mixing and processing
- identifying technical errors and suggesting remedies.

4.4 Assessment criteria for Section B

Mixdown (AO4)		
BLEND AND BALANCE	6	Consistently well balanced and effectively blended across all parts of the mix.
	4–5	Most tracks are well balanced. Some minor slips on one or two parts. Some effective blending of sounds.
	2–3	Inconsistent balance. Important parts may be masked. Some unsuccessful blends.
	0–1	Poorly balanced. Detrimental to the musical outcome.
USE OF STEREO FIELD	6	Creative, musically appropriate use of stereo field.
	4–5	Mainly good use of stereo field, but with minor inconsistencies.
	2–3	Inappropriate or inconsistent use of stereo field.
	0–1	Little or no use of stereo field or significant misjudgements in panning.
USE OF EFFECTS	6	Excellent, creative use of stylistically appropriate effects.
	4–5	Well controlled use of appropriate effects.
	2–3	Some inconsistency in application of effects processing.
	0–1	Unacceptably dry, reverberant or uncontrolled use of effects processing.

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D Assessment and additional information

Assessment information

Assessment requirements	For a summary of assessment requirements and assessment objectives, see *Section B*.
Entering candidates for this qualification	Details of how to enter candidates for the examinations for this qualification can be found in Edexcel's Information Manual, copies of which are sent to all examinations officers. The information can also be found on Edexcel's website: www.edexcel.com.
Resitting of units	There is no limit to the number of times that a student may retake a unit prior to claiming certification for the qualification. The best available result for each contributing unit will count towards the final grade. After certification all unit results may be reused to count towards a new award. Students may re-enter for certification only if they have retaken at least one unit. Results of units held in the Edexcel unit bank have a shelf life limited only by the shelf life of this specification.
Awarding and reporting	The grading, awarding and certification of this qualification will comply with the requirements of the current GCSE/GCE Code of Practice, which is published by the Office of Qualifications and Examinations Regulation (Ofqual). The AS qualification will be graded and certificated on a five-grade scale from A to E. The full GCE Advanced level will be graded on a six-point scale A* to E. Individual unit results will be reported. A pass in an Advanced Subsidiary subject is indicated by one of the five grades A, B, C, D, E of which Grade A is the highest and Grade E the lowest. A pass in an Advanced Level GCE subject is indicated by one of the six grades A*, A, B, C, D, E of which Grade A* is the highest and Grade E the lowest. To be awarded an A* students will need to achieve an A on the full GCE Advanced level qualification and an A* aggregate of the A2 units. Students whose level of achievement is below the minimum judged by Edexcel to be of sufficient standard to be recorded on a certificate will receive an unclassified U result.
Performance descriptions	Performance descriptions give the minimum acceptable level for a grade. See *Appendix 3* for the performance descriptions for this subject.

Unit results

The minimum uniform marks required for each grade for each unit:

Unit 1

Unit grade	A	B	C	D	E
Maximum uniform mark = 140	**112**	**98**	**84**	**70**	**56**

Candidates who do not achieve the standard required for a grade E will receive a uniform mark in the range 0–55.

Unit 2

Unit grade	A	B	C	D	E
Maximum uniform mark = 60	**48**	**42**	**36**	**30**	**24**

Candidates who do not achieve the standard required for a grade E will receive a uniform mark in the range 0–23.

Unit 3

Unit grade	A	B	C	D	E
Maximum uniform mark = 120	**96**	**84**	**72**	**60**	**48**

Candidates who do not achieve the standard required for a grade E will receive a uniform mark in the range 0–47.

Unit 4

Unit grade	A	B	C	D	E
Maximum uniform mark = 80	**64**	**56**	**48**	**40**	**32**

Candidates who do not achieve the standard required for a grade E will receive a uniform mark in the range 0–31.

Qualification results

The minimum uniform marks required for each grade:

Advanced Subsidiary Cash-in code 8MT01

Qualification grade	**A**	**B**	**C**	**D**	**E**
Maximum uniform mark = 200	**160**	**140**	**120**	**100**	**80**

Candidates who do not achieve the standard required for a grade E will receive a uniform mark in the range 0–79.

Advanced GCE Cash-in code 9MT01

Qualification grade	**A**	**B**	**C**	**D**	**E**
Maximum uniform mark = 400	**320**	**280**	**240**	**200**	**160**

Candidates who do not achieve the standard required for a grade E will receive a uniform mark in the range 0–159.

Language of assessment

Assessment of this specification will be available in English only. Assessment materials will be published in English only and all work submitted for examination and moderation must be produced in English.

Quality of written communication

Students will be assessed on their ability to:

■ write legibly, with accurate use of spelling, grammar and punctuation in order to make their meaning clear

■ select and use a form and style of writing appropriate to purpose and to complex subject matter

■ organise relevant information clearly and coherently, using specialist vocabulary when appropriate.

Students will be given the opportunity to demonstrate quality of written communication in Units 1, 2 and 4.

Assessment objectives and weighting

		% in AS	% in A2	% in GCE
AO1	Interpret musical ideas with technical and expressive control and a sense of style and awareness of occasion and/or ensemble (*performing/realising*).	15%	15%	15%
AO2	Create and develop musical ideas with technical control and expressive understanding making creative use of musical devices, conventions and resources (*composing/arranging*).	15%	16%	15.5%
AO3	Demonstrate understanding of, and comment perceptively on, the structural, expressive and contextual aspects of music (*appraising*).	25%	10%	17.5%
AO4	Demonstrate effective use of music technology to capture, edit and produce musical outcomes.	30%	39%	34.5%
AO5	Demonstrate understanding of and comment perceptively on the technical processes and principles that underpin effective use of music technology.	15%	20%	17.5%
	TOTAL	100%	100%	100%

Synoptic assessment	In synoptic assessment there should be a concentration on the quality of assessment to ensure that it encourages the development of the holistic understanding of the subject.

Synopticity requires students to connect knowledge, understanding and skills acquired in different parts of the Advanced GCE course.

Unit 3 Task 3C requires students to apply what they have learnt at Advanced Subsidiary to produce a composition and brings all three Areas of Study together.

Unit 4 requires students to demonstrate aural perception and to make connections between all the skills and activities that they have encountered within the practical music technology work within the course.

Unit 4 aims to undertake synoptic assessment of the skills and knowledge gained in all other aspects of the qualification. It is designed to provide students with the opportunity to demonstrate their understanding of the principles that underpin music technology through a series of task-focused questions and production tasks. It is expected that the vast majority of the skills and knowledge assessed within this unit will have been taught and learnt as an integral part of the practical activities inherent within the other units in the qualification.

Stretch and challenge

Students can be stretched and challenged in A2 units through the use of different assessment strategies, for example:

- use of a wider range of question types to address different skills — for example problem solving, working to a brief, mixing down under examination conditions
- introducing topics in Unit 3 Task 3B to encourage them to use a wider range of sounds, more tracks required, working to a higher level of complexity
- composing rather than arranging
- integrating live recording tracks with sequenced tracks.

Additional information

Malpractice and plagiarism

For up-to-date advice on malpractice and plagiarism, please refer to the latest *Joint Council for Qualifications (JCQ) Instructions for Conducting Coursework* document. This document is available on the JCQ website: www.jcq.org.uk.

For additional information on malpractice, please refer to the latest *Joint Council for Qualifications (JCQ) Suspected Malpractice in Examinations And Assessments: Policies and Procedures* document, available on the JCQ website.

Access arrangements and special requirements

Edexcel's policy on access arrangements and special considerations for GCE, GCSE, and Entry Level is designed to ensure equal access to qualifications for all students (in compliance with the Equality Act 2010) without compromising the assessment of skills, knowledge, understanding or competence.

Please see the Joint Council for Qualifications (JCQ) website (www.jcq.org.uk) for their policy on access arrangements, reasonable adjustments and special considerations.

Please see our website (www.edexcel.com) for:

- the forms to submit for requests for access arrangements and special considerations
- dates to submit the forms.

Requests for access arrangements and special considerations must be addressed to:

Special Requirements
Edexcel
One90 High Holborn
London WC1V 7BH

Equality Act 2010

Please see our website (www.edexcel.com) for information on the Equality Act 2010.

Prior learning and progression

Prior learning

Students who would benefit most from studying a GCE in Music Technology are likely to have a Level 2 qualification such as a GCSE in Music at grades A*–C or a BTEC First Certificate or BTEC First Diploma in Music.

Progression

This qualification supports progression into further education, training or employment, such as a degree in Music Technology or a vocational course such as a BTEC HNC or HND in Music Production.

Combinations of entry

There are no forbidden combinations.

Student recruitment	Edexcel's access policy concerning recruitment to our qualifications is that:

- they must be available to anyone who is capable of reaching the required standard

- they must be free from barriers that restrict access and progression

- equal opportunities exist for all students.

The wider curriculum	This qualification provides opportunities for developing an understanding of spiritual, moral, ethical, social and cultural issues, together with an awareness of environmental issues, health and safety considerations, as applied to Music Technology. *Appendix 4: Wider curriculum* maps the opportunities available.

E Resources, support and training

Resources to support the specification

In addition to the resources available in the Getting Started book, Edexcel produces a wide range of resources to support this specification.

Edexcel's own published resources

Edexcel aims to provide the most comprehensive support for our qualifications. We have therefore published our own dedicated suite of resources for teachers and students written by qualification experts.

Edexcel publications

You can order further copies of the specification and SAMs documents from:

Edexcel Publications
Adamsway
Mansfield
Notts NG18 4FN

Telephone: 01623 467467
Fax: 01623 450481
Email: publication.orders@edexcel.com
Website: www.edexcel.com

Additional resources endorsed by Edexcel

Edexcel also endorses additional materials written to support this qualification.

Any resources bearing the Edexcel logo have been through a rigorous endorsement procedure to ensure complete and accurate coverage of the specification.

For up-to-date information about endorsed resources, please visit www.edexcel.org.co.uk/endorsement.

Please note that while resources are checked at the time of publication, materials may be withdrawn from circulation and website locations may change.

The resources listed are intended to be a guide for teachers and not a comprehensive list. Further suggestions can be found in *Appendix 6*.

Please see www.edexcel.com/gce2008 for up to date information.

Edexcel support services

Edexcel support services

Edexcel has a wide range of support services to help you implement this qualification successfully.

ResultsPlus – ResultsPlus is an application launched by Edexcel to help subject teachers, senior management teams, and students by providing detailed analysis of examination performance. Reports that compare performance between subjects, classes, your centre and similar centres can be generated in 'one-click'. Skills maps that show performance according to the specification topic being tested are available for some subjects. For further information about which subjects will be analysed through ResultsPlus, and for information on how to access and use the service, please visit www.edexcel.com/resultsplus

Ask the Expert – to make it easier for our teachers to ask us subject specific questions we have provided the **Ask the Expert** Service. This easy-to-use web query form will allow you to ask any question about the delivery or teaching of Edexcel qualifications. You'll get a personal response, from one of our administrative or teaching experts, sent to the email address you provide. You can access this service at www.edexcel.com/ask

Support for Students

Learning flourishes when students take an active interest in their education; when they have all the information they need to make the right decisions about their futures. With the help of feedback from students and their teachers, we've developed a website for students that will help them:

- understand subject specifications

- access past papers and mark schemes

- learn about other students' experiences at university, on their travels and when entering the workplace.

We're committed to regularly updating and improving our online services for students. The most valuable service we can provide is helping schools and colleges unlock the potential of their learners. www.edexcel.com/students

Training

A programme of professional development and training courses, covering various aspects of the specification and examination, will be arranged by Edexcel each year on a regional basis. Full details can be obtained from:

Training from Edexcel
Edexcel
One90 High Holborn
London WC1V 7BH

Email: trainingbookings@pearson.com
Website: www.edexcel.com/training

F   Appendices

Task 1A: Sequenced Realised Performance

1 Complete the following information about the equipment that you used when working on your sequenced performance:

(a) Computer and processor (eg Dell Dimension, Intel Core 2 duo)

....

(b) Main Digital Audio Workstation software (eg Cubase 4, Logic Pro7)

....

(c) Additional software (including plug ins) (eg Reason 2.5, Hypersonic 2, Virtual Guitarist)

....

(d) Audio/MIDI interface (eg MOTU 828)

....

(e) Other external hardware (eg sound module(s) or effects processors)

....

(f) Keyboard (eg M Audio Oxygen)

....

2 List the sources of any commercial loops or samples used (ie any that are not included with the software listed in Question 1), (eg Sample Labs: iLoops).

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Task 1B: Multi-track Recording

Title of piece recorded, with details of composer/original band or artist:

....

3 Complete the following information about the equipment that you used when working on your recording:

(a) Microphones

....

(b) Multi-track hard disk recorder or software

....

(c) Mixing desk

....

(d) Dynamic processing and effects

....

(e) Other equipment (eg DI box)

....

4 Using the space below, and continuing on a separate page if necessary, draw and label diagrams to show how you arranged the microphones you used. You may attach photographs if you prefer.

5 Complete the table below to show how you recorded each track.

Track	Instrument	Mic used/DI	Position and capture
Example	Guitar	SM58	Tune guitar, check lead, mic positioned in cradle in front of amp in corner of room. Played/captured with rhythm section
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			

6 Complete the track sheet below.

Track sheet

	Track 1	Track 2	Track 3	Track 4	Track 5	Track 6	Track 7
Instrument/ voice							
EQ							
FX							
Dynamic processing							
Panning (L-R)	◯	◯	◯	◯	◯	◯	◯
Level							

	Track 8	Track 9	Track 10	Track 11	Track 12
Instrument/ voice					
EQ					
FX					
Dynamic processing					
Panning (L-R)	◯	◯	◯	◯	◯
Level					

Task 1C: Creative Sequenced Arrangement

Show which one of the two prescribed stimuli, and which one of the two prescribed styles, you have used for your arrangement.

Stimulus chosen:	
Style chosen:	

7 Complete the following information about the equipment that you used when working on your sequenced arrangement:

(a) Hardware (eg computer, keyboard etc)

……………………………………………………………………………………………… .

(b) Sequencing software (eg Cubase, Logic)

……………………………………………………………………………………………… .

(c) Sound sources (eg GM, Hypersonic 2)

……………………………………………………………………………………………… .

(d) Other software or resources (eg additional plug-ins, samples etc)

……………………………………………………………………………………………… .

8 List the sources of any loops or samples used.

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Each of the following questions is worth 10 marks.

Both questions refer to Task 1C: Creative Sequenced Arrangement.

Your answers to Questions 9 and 10 may be in note form, bullet points, or in continuous prose.

9 Explain how you developed your completed sequenced arrangement from your chosen stimulus. Refer to at least two of the following: structure; texture; harmony and tonality; melody; rhythm.

....

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10 Identify the most important features of your chosen style, and explain how you have used them in your arrangement.

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Task 3A: Sequenced Integrated Performance

Show which one of the two prescribed songs you have used for your sequenced performance.

Song chosen:	

1 Complete the following information about the equipment that you used when working on your sequenced performance:

(a) Computer and processor (eg Dell Dimension, Intel Core 2 duo)

....

(b) Main Digital Audio Workstation software (eg Cubase 4, Logic Pro7)

....

(c) Additional software (including plug-ins) (eg Reason 2.5, Hypersonic 2, Virtual Guitarist)

....

(d) Audio/MIDI interface (eg MOTU 828)

....

(e) Other external hardware (eg sound module(s) or effects processors)

....

(f) Keyboard (eg M Audio Oxygen)

....

2 Complete the following information about the equipment that you used to complete your audio track capture.

(a) Microphones

....

(b) Multi-track hard disk recorder or software

....

(c) Mixing desk

....

(d) Dynamic processing and effects

....

(e) Other equipment (eg DI box)

....

3 List the sources of any commercial loops or samples used (ie any that are not included with the software listed in Question 1) (eg Sample Labs: iLoops).

....

....

....

....

....

....

....

Task 3B: Multi-track Recording

Title of piece recorded, with details of composer/original band or artist:

....

4 Complete the following information about the equipment that you used when working on your recording:

(a) Microphones

....

(b) Multi-track hard disk recorder or software

....

(c) Mixing desk

....

(d) Dynamic processing and effects

....

(e) Other equipment (eg DI box)

....

5 Using the space below, and continuing on a separate page if necessary, draw and label diagrams to show how you arranged the microphones you used. You may attach photographs if you prefer.

6 Complete the table below to show how you recorded each track.

Track	Instrument	Mic used/DI	Position and capture
Example	Guitar	SM58	Tune guitar, check lead, mic positioned in cradle in front of amp in corner of room. Played/captured with rhythm section.
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			

Track	Instrument	Mic used/DI	Position and capture
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			

7   Complete the track sheet below.

Track sheet

	Track 1	Track 2	Track 3	Track 4	Track 5	Track 6	Track 7
Instrument/ voice							
EQ							
FX							
Dynamic processing							
Panning (L-R)	◯	◯	◯	◯	◯	◯	◯
Level							

	Track 8	Track 9	Track 10	Track 11	Track 12	Track 13	Track 14
Instrument/voice							
EQ							
FX							
Dynamic processing							
Panning (L-R)	◯	◯	◯	◯	◯	◯	◯
Level							

Pearson Edexcel Level 3 GCE in Music Technology

	Track 15	Track 16	Track 17	Track 18	Track 19	Track 20	Track 21
Instrument/ voice							
EQ							
FX							
Dynamic processing							
Panning (L-R)	◯	◯	◯	◯	◯	◯	◯
Level							

	Track 22	Track 23	Track 24
Instrument/voice			
EQ			
FX			
Dynamic processing			
Panning (L-R)	◯	◯	◯
Level			

Task 3C: Composing using Music Technology

Show which one of the three briefs you have used, and give the name of your composition.

Brief chosen:	
Name of composition:	

8 Complete the following information about the equipment that you used when working on your sequenced arrangement:

(a) Hardware (eg computer, keyboard etc)

………………………………………………………………………………………………………

(b) Sequencing software (eg Cubase, Logic)

………………………………………………………………………………………………………

(c) Sound sources (eg GM, Hypersonic 2)

………………………………………………………………………………………………………

(d) Other software or resources (eg additional plug-ins, samples etc)

………………………………………………………………………………………………………

9 List the sources of any loops or samples used.

....

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Introduction

Performance descriptions have been created for all GCE subjects. They describe the learning outcomes and levels of attainment likely to be demonstrated by a representative candidate performing at the A/B and E/U boundaries for AS and A2.

In practice most candidates will show uneven profiles across the attainments listed, with strengths in some areas compensating in the award process for weaknesses or omissions elsewhere. Performance descriptions illustrate expectations at the A/B and E/U boundaries of the AS and A2 as a whole; they have not been written at unit level.

Grade A/B and E/U boundaries should be set using professional judgement. The judgement should reflect the quality of candidates' work, informed by the available technical and statistical evidence. Performance descriptions are designed to assist examiners in exercising their professional judgement. They should be interpreted and applied in the context of individual specifications and their associated units. However, performance descriptions are not designed to define the content of specifications and units.

The requirement for all AS and A level specifications to assess candidates' quality of written communication will be met through one or more of the assessment objectives.

The performance descriptions have been produced by the regulatory authorities in collaboration with the awarding bodies.

AS performance descriptions for Music Technology

Assessment objectives	Assessment objective 1	Assessment objective 2	Assessment objective 3	Assessment objective 4	Assessment objective 5
	Interpret musical ideas with technical and expressive control and a sense of style and awareness of occasion and/or ensemble *(performing/realise)*.	Create and develop musical ideas with technical control and expressive understanding making creative use of musical devices, conventions and resources *(composing/arranging)*.	Demonstrate understanding of, and comment perceptively on, the structural, expressive and contextual aspects of music.	Demonstrate effective uses of music technology to capture, edit and produce musical outcomes.	Demonstrate understanding of and comment perceptively on the technical processes and principles that underpin effective use of music technology.
A/B boundary performance descriptions	Candidates characteristically: a produce musical recordings and sequences which show a high level of control and understanding, and a creative and imaginative use, of the technology.	Candidates characteristically: a produce convincing arrangements that show musical imagination and expression and make appropriate and creative use of a wide range of resources and techniques.	Candidates characteristically: a make critical judgements about music heard and show a breadth of understanding across the genres, styles and traditions studied b demonstrate a thorough understanding of the development of music technology.	Candidates characteristically: a demonstrate a highly accomplished use of a wide range of music technology skills to produce excellent recordings b capture, process and mix sound to produce consistently well-balanced and effectively balanced tracks.	Candidates characteristically: a demonstrate a high level of aural perception in comprehensively identifying a wide range of instruments and effects, and in recognising and describing the creative use of music technology b successfully identify a range of shortcomings in earlier recordings and suggest how they might be overcome using modern-day recording techniques.

E/U boundary performance descriptions	Assessment objective 1	Assessment objective 2	Assessment objective 3	Assessment objective 4	Assessment objective 5
	Candidates characteristically:	Candidates characteristically:	Candidates characteristically:	Candidates characteristically:	Candidates characteristically:
	a use technology with sufficient control and understanding to produce musical recordings and sequences.	a produce arrangements with sufficient control and understanding of relevant resources and techniques to achieve the intended effect	a comment on music heard, showing some understanding across the genres, styles and traditions studied b show some understanding of the development of music technology.	a demonstrate limited use of some basic music technology skills to produce recordings with some encouraging signs b mix sound to produce recordings with a lack of clarity, poor balance and inconsistent management of the resources, leading to tracks of limited success.	a demonstrate limited aural perception in identifying instruments and effects and show only modest awareness of the creative use of music technology b identify some shortcomings in earlier recordings and suggest some ways in which they might be overcome using modern-day recording techniques.

A2 performance descriptions for Music Technology

	Assessment objective 1	Assessment objective 2	Assessment objective 3	Assessment objective 4	Assessment objective 5
Assessment objectives	Interpret musical ideas with technical and expressive control and a sense of style and awareness of occasion and/or ensemble (performing/realise).	Create and develop musical ideas with technical control and expressive understanding making creative use of musical devices, conventions and resources (composing/arranging).	Demonstrate understanding of, and comment perceptively on, the structural, expressive and contextual aspects of music.	Demonstrate effective uses of music technology to capture, edit and produce musical outcomes.	Demonstrate understanding of and comment perceptively on the technical processes and principles that underpin effective use of music technology.
A/B boundary performance descriptions	Candidates characteristically: a produce musical recordings that effectively integrate sequencing and recording skills b demonstrate an authoritative use of a wide range of resources and techniques.	Candidates characteristically: a produce compositions that show an imaginative and effective use of technical resources, musical devices and conventions, and meet all the requirements of the brief.	Candidates characteristically: a make critical judgements about, and justify personal opinions on, music heard and show some depth of understanding within the genres, styles and traditions studied, making perceptive and informed connections between the structural, expressive and contextual aspects of music b demonstrate a thorough and comprehensive understanding of the contexts and development of music technology.	Candidates characteristically: a demonstrate a highly accomplished use of a wide range of music technology skills to produce excellent recordings b capture, process and mix sound to produce consistently well balanced and effectively blended tracks c make mature and sophisticated use of appropriate music technology in a composition which produces a thoroughly satisfying outcome for the listener.	Candidates characteristically: a demonstrate a comprehensive knowledge of the technical processes and principles which can be employed to achieve a completely successful recording b apply their skill, knowledge and understanding to produce an excellent final balanced stereo mix using appropriate effects where any small slips or misjudgements are unobtrusive.

E/U boundary performance descriptions	Assessment objective 1	Assessment objective 2	Assessment objective 3	Assessment objective 4	Assessment objective 5
	Candidates characteristically:	Candidates characteristically:	Candidates characteristically:	Candidates characteristically:	Candidates characteristically:
	a produce musical recordings that integrate sequencing and recording skills	a produce compositions that show sufficient technical control and understanding of resources, musical devices and conventions to meet the minimum requirements of the brief.	a comment in some detail on music heard, showing some understanding across the genres, styles and traditions studied and the ability to make some connections between the structural, expressive and contextual aspects of music	a demonstrate limited use of some basic music technology skills to produce recordings with some encouraging signs but where there are areas of inconsistency	a demonstrate a basic knowledge of the technical processes and principles which can be employed to achieve a satisfactory recording
	b demonstrate a broad but basic use of a range of resources and techniques.		b demonstrate a broad but basic understanding of the contexts and development of music technology.	b capture, process and mix sound to produce recordings where inconsistent management of the resources leads to tracks of limited success	b apply their skill knowledge and understanding to produce a final balanced stereo mix using appropriate effects where the handling is adequate but where there are some intrusive errors.
				c make some attempt to use music technology to produce a basic composition but one which has some inconsistencies and technical problems.	

Signposting

Issue	Unit 1	Unit 2	Unit 3	Unit 4
Spiritual	✓		✓	
Moral	✓		✓	
Ethical	✓		✓	
Social	✓		✓	
Cultural	✓	✓	✓	✓
Environmental		✓		✓
Health and safety	✓	✓	✓	✓

Development suggestions

Issue	AS/A2 units	Opportunities for development or internal assessment
Spiritual	Units 1 and 3	Music technology provides opportunities for candidates to express their creativity through the creation of recordings, arrangements and compositions. Such expression can be seen as an important part as an individual's spirituality.
Moral	Units 1, 3	Owing to the ever widening availability of MIDI on the internet, candidates will need to exercise moral judgement that all the work they submit is their own.
Ethical	Units 1, 3	Owing to the ever-widening availability of MIDI on the internet, and the fact that candidates will be working with examples of a number of styles of music, candidates will need to ensure that they do not copy ideas from previous composers' work and take credit.
Social	Units 1, 3	When creating a multi-track recording, candidates will need to work with a group of instrumentalists to create the recording. They may need to set up schedules for the recordings and work in a group.
Cultural	Units 1, 2, 3, 4	Candidates will be studying music from different decades and cultures. They will be asked to evaluate, analyse and contextualise both familiar and unfamiliar music in the written exams.
Environmental	Units 2, 4	Candidates may discuss, through the principles of music technology in practice area of study the fact that music technology equipment is continually developing. Therefore, there is a continual need for more up to date systems and hardware. Computers and technology equipment quickly become obsolete and candidates should be aware of what happens to the out-of-date equipment.
Health and safety	Units 1, 2, 3, 4	Candidates should learn how to use the equipment in the recording studio in a safe way. They should be taught of what to do in event of an electrical problem.

Type of code	Use of code	Code number
National classification codes	Every qualification is assigned to a national classification code indicating the subject area to which it belongs. Centres should be aware that students who enter for more than one GCE qualification with the same classification code will have only one grade (the highest) counted for the purpose of the school and college performance tables.	7040
National Qualifications Framework (NQF) codes	Each qualification title is allocated a National Qualifications Framework (NQF) code. The National Qualifications Framework (NQF) code is known as a Qualification Number (QN). This is the code that features in the DfE Section 96, and on the LARA as being eligible for 16–18 and 19+ funding, and is to be used for all qualification funding purposes. The QN is the number that will appear on the student's final certification documentation.	The QNs for the qualifications in this publication are: Advanced Subsidiary — 500/3103/x Advanced GCE — 500/3102/8
Unit codes	Each unit is assigned a unit code. This unit code is used as an entry code to indicate that a student wishes to take the assessment for that unit. Centres will need to use the entry codes only when entering students for their examination.	Unit 1 — 6MT01 Unit 2 — 6MT02 Unit 3 — 6MT03 Unit 4 — 6MT04
Cash-in-codes	The cash-in code is used as an entry code to aggregate the student's unit scores to obtain the overall grade for the qualification. Centres will need to use the entry codes only when entering students for their qualification.	AS — 8MT01 A2 — 9MT01
Entry codes	The entry codes are used to: 1 enter a student for the assessment of a unit 2 aggregate the student's unit scores to obtain the overall grade for the qualification.	Please refer to the Edexcel Information Manual available on the Edexcel website.

Please note that while resources are checked at the time of publication, materials may be withdrawn from circulation and website locations may change at any time.

Books

Sequencing and recording

As an initial resource for centres wishing to offer AS/A2 Music Technology to their students the series of BASIC books by Paul White is recommended. It is possible to buy the complete range of 13 books at reasonable cost. All volumes are relevant to this course. Website: www.sanctuarypublishing.com

Fast guides to various sequencer packages

There are many valuable books which guide the reader in mastering the techniques of a particular sequencer; ensure the book covers the specific version of your software.
Website: www.pc-publishing.com

Composing and arranging

Aschmann L — *500 Songwriting Ideas* (Omnibus Press, 1998)
ISBN 10: 0918371155, ISBN 13: 978-0918371157

Benham H — *A Student's Guide to Harmony and Counterpoint*
(Rhinegold, 2004) ISBN 10: 1904226310

Bennett R — *Fortissimo!* (Cambridge, 1996) ISBN 10: 0521569230,
ISBN 13: 978-0521569231

Cole B — *The Pop Composer's Handbook* (Schott & Co Ltd, 2006)
ISBN 10: 1902455606

Perricone J — *Melody in Songwriting* (IMP, 2000)
ISBN 10: 063400638X, ISBN 13: 978-0634006388

Runswick D — *Rock, Pop and Jazz Arranging* (Faber, 1993)
ISBN 10: 0571511082, ISBN 13: 978-0571511082

Scott R — *Chord Progressions for Songwriters*
(iUniverse.com, 2003) ISBN 10: 0595263844,
ISBN 13: 978-0595263844

Stewart D — *Inside the Music: The Musician's Guide to
Composition, Improvisation and the Mechanics of Music* (Backbeat
UK, 2000) ISBN 10: 0879305711, ISBN 13: 978-0879305710

Turkel E — *Arranging Techniques for Synthesists* (Music Sales Ltd,
2003) ISBN 10: 082561130X, ISBN 13: 978-0825611308

Wyatt K — *Harmony and Theory: A Comprehensive Source for All
Musicians* (Hal Leonard Corporation, 1998) ISBN 10: 0793579910,
ISBN 13: 978-0793579914

Contexts

Barrow S and Dalton P — *Reggae (Rough Guide Music Guides)* (Rough Guides, 2004) ISBN 10: 1843533294, ISBN 13: 978-1843533290

Bidder S — *Pump Up th*e Volume: A History of House Music (Channel 4 Books, 2001) ISBN 10: 0752219863, ISBN 13: 978-0752219868

Easlea D — 'Chic': Everybody Dance — The Politics of Disco (Helter Skelter, 2004) ISBN 10: 1900924560, ISBN 13: 978-1900924566

George N — The Death of Rhythm and Blues (Penguin, 2008) ISBN 10: 0142004081, ISBN 13: 978-0142004081

George N — Where Did Our Love Go? (Omnibus, 2003) ISBN 10: 0711995117, ISBN 13: 978-0711995116

Griffiths P — Modern Music and After: Directions Since 1945 (Oxford University Press, 2011) ISBN 10: 0199740505, ISBN 13: 978-0199740505

Guralnick P — Sweet Soul Music (MOJO Books, 2002) ISBN 10: 1841952400, ISBN 13: 978-1841952406

Harvey E — Jazz in the Classroom (Boosey and Hawks, 1988) ISBN 10: 0851620442, ISBN 13: 978-0851620442

Holmes T — Electronic and Experimental Music (Routledge, 2012) ISBN 10: 0415896363, ISBN 13: 978-0415896368

Kettlewell B — Electronic Music Pioneers (Course Technology, 2001) ISBN 10: 1931140170, ISBN 13: 978-1931140171

Levine M — The Jazz Theory Book (Sher Music, 1995) ISBN 10: 1883217040, ISBN 13: 978-1883217044

Lincoln-Collier J — The Making of Jazz (Papermac, 1981) ISBN 10: 0333316479, ISBN 13: 978-0333316474

Nyman M — Experimental Music: Cage and Beyond (Music in the Twentieth Century) (Cambridge University Press, 1999) ISBN 10: 0521653835, ISBN 13: 978-0521653831

Palmer R — *Dancing in the Street* (BBC, 1996)
ISBN 10: 0563369965, ISBN 13: 978-0563369967

Prendergast M — *The Ambient Century: From Mahler to Moby —
The Evolution of Sound in the Electronic Age* (Bloomsbury, 2003)
ISBN 10: 0747557322, ISBN 13: 978-0747557326

Savage J — *England's Dreaming: Sex Pistols and Punk Rock*
(Faber and Faber, 2005) ISBN 10: 0571227201, ISBN 13: 978-
0571227204

Schaefer J — *New Sounds: The Virgin Guide to New Music* (Virgin
Books, 1989) ISBN 10: 086369375X, ISBN 13: 978-0863693755

Schaefer J — *New Sounds: The Virgin Guide to New Music* (Harper
and Row, New York, 1989) ISBN 10: 086369375X,
ISBN 13: 978-0863693755

Schuker R — *Key Concepts in Popular Music* (Routledge, 1998)
ISBN10: 0415161045, ISBN 13: 978-0415161046

Taylor T — *Strange Sounds: Music, Technology, and Culture*
(Routledge, 2011) ISBN 10: 0415936845,
ISBN 13: 978-0415936842

Winterson J — *Pop Music: the Textbook* (Peters Ed, 2003)
ISBN 10: 1843670070, ISBN 13: 978-1843670070

Listening	Bowman D — *Aural Matters* (Schott, 1993) ISBN 10: 0946535221, ISBN 13: 978-0946535224
	Taylor E — *The AB Guide to Music Theory Volume I* (OUP, 1989) ISBN 10: 1854724460, ISBN 13: 978-1854724465
	Taylor E — *The AB Guide to Music Theory Part II* (OUP, 1991) ISBN 10: 1854724479, ISBN 13: 978-1854724472
Audio sequencing	Bennett S — *Emagic Logic Virtual Instruments: A User's Guide* (PC Publishing, 2003) ISBN 10: 1870775848, ISBN 13: 978 1870775847
	Collins M — *Pro Tools for Music Production: Practical Recording, Editing and Mixing for Music Production* (Focal Press, 2001) ISBN 10: 0240516400, ISBN 13: 978-0240516400

Recording	Bartlett B — *Practical Recording Techniques* (Focal press, 2008) ISBN 10: 0240811445, ISBN 13: 978- 0240811444
	Eargle J — *The Microphone Book: From Mono to Stereo to Surround, A Guide to Microphone Design and Application* (Focal Press, 2011) ISBN 10: 0240820754, ISBN 13: 978-0240820750
	Gibson B — *Sound Advice on Microphone Techniques* (Music Sales, 2002) ISBN 10: 1931140278, ISBN 13: 978-1931140270
	Guerin R — *Inside the Recording Studio* (Course Technology, 2004) ISBN 10: 1592001319, ISBN 13: 978-1592001316
	Mansfield R — *Studio Basics: What You Should Know Before Going into the Recording Studio* (Billboard Books, US, 1998) ISBN 10: 0823084884, ISBN 13: 978-0823084883
	Owsinski B — *The Mixing Engineer's Handbook (Mix Pro Audio Series)* (Music Sales, 2006) ISBN 10: 1598632515, ISBN 13: 978-1598632514
	Runstein R — *Modern Recording Techniques* (Focal Press, 2009) ISBN 10: 0240810694, ISBN 13: 978-0240810690
Sound of picture	Davis R — *Complete Guide to Film Scoring* (Berklee Guide, 2010) ISBN 10: 0876391099, ISBN 13: 978-0876391099
	Karlin F — *On the Track: A Guide to Contemporary Film Scoring* (Routledge, 2004) ISBN 10: 0415941369, ISBN 13: 978-0415941365
	Rona J — *The Reel World: Scoring for Pictures* (Backbeat, UK, 2006) ISBN 10: 0879305916, ISBN 13: 978-0879305918
Production	Burgess R — *The Art of Record Production* (Omnibus, 1997) ISBN 10: 0711955522, ISBN 13: 978-0711955523
	Massey H — *Behind the Glass: Top Record Producers Tell How They Craft the Hits* (Backbeat UK, 2000) ISBN 10: 0879306149, ISBN 13: 978-0879306144

Useful websites

www.edexcel.com/gce2008

Sound on Sound

The monthly music technology journal produces an annual CD. Each disc contains all the magazine contents from that year including technique-based tutorials useful to students.
Website: www.soundonsound.com

Other support

Dave Moulton KIQ — *Golden Ears Music Technology Ear Training CDs*

Dave Moulton KIQ — *Total Recording, 0.9674304.0.2*