Advanced Higher
Coursework
Assessment Task

SQA

Advanced Higher Music Technology

Project–research

Assessment task

This document provides information for teachers and lecturers about the coursework component of this course in terms of the skills, knowledge and understanding that are assessed. It **must** be read in conjunction with the course specification.

Valid from session 2023-24 and until further notice.

Contents

Introduction

This document contains instructions for teachers and lecturers and instructions for candidates for the Advanced Higher Music Technology project—research. You must read it in conjunction with the course specification.

This project—research is worth 40 marks. This is 30% of the overall marks for the course assessment.

This is one of two course assessment components. The other component is a project—production.

The research project allows candidates to demonstrate practical skills in project planning, independent thinking, research, and critical listening. Candidates investigate and analyse, experiment with, and synthesise music technology skills, techniques, and processes, and present their findings in a suitable format.

Candidates should clearly demonstrate a high level of skill in investigation and research (as defined in the 'task requirements' section of this document).

This project—research has three stages:

Stage 1 'identifying and outlining a topic' has 5 marks.
Stage 2 'investigating and analysing, experimenting, and synthesising' has 30 marks.
Stage 3 'organising and presenting' has 5 marks.

Teachers or lecturers should provide candidates with the 'instructions for candidates' in this document.

Instructions for teachers and lecturers

Task requirements

Candidates can choose their research project topic from any appropriate music technology context that provides sufficient scope for investigation and analysis, experimentation, and synthesis of music technology skills, techniques, and processes, such as:

♦ advanced Foley and sound design techniques in contemporary action sequences

♦ advanced sound production techniques in modern rock music

♦ advanced mixing techniques in 21st century pop music

♦ mastering techniques

♦ advanced mic'ing and recording techniques in contemporary classical production

Candidates should avoid contexts that are too broad or do not provide sufficient scope for the research project.

An example of a context that is too broad is 'multi-tracked production techniques'. Candidates may struggle to identify particular skills, techniques, and processes, as there are so many possible sub contexts within this very broad area.

A context that does not provide enough scope is 'voice-over recording techniques', as there is a finite number of skills, techniques, and processes candidates could research.

Candidates must define their own brief. They must agree their chosen context and research topic with you, to ensure it meets all of the assessment task requirements. The context and research topic must allow candidates to demonstrate all of the required research and technical skills listed below.

Autonomous working and independent thinking skills
♦ working without guidance and supervision
♦ rephrasing, refining, and improving responses independently
♦ integrating
♦ analysing
♦ synthesising
♦ evaluating

Project management skills
♦ producing an outline project specification
♦ defining timelines
♦ managing resources
♦ projecting outcomes
♦ tracking progress
♦ evaluating project outcomes

Investigation and research skills in the context of music technology

♦ identifying an appropriate research topic in a music technology context

♦ using information from a range of text and/or digital sources

♦ investigating and analysing music technology skills, techniques, and processes

♦ experimenting with music technology skills, techniques, and processes

♦ synthesising investigation and analysis, and experimentation, and drawing conclusions

♦ organising and presenting

Critical listening skills

♦ analysing audio recordings and production techniques, including relevant musical analysis where appropriate

Marking instructions

In line with SQA's normal practice, the following marking instructions for the Advanced Higher Music Technology research project are addressed to the marker. They will also be helpful for those preparing candidates for course assessment.

Candidates' evidence is submitted to SQA for external marking.

General marking principles

Always apply these general principles. Use them in conjunction with the detailed marking instructions, which identify the key features required in candidates' responses.

a   Always use positive marking. This means candidates accumulate marks for the demonstration of relevant skills, knowledge and understanding; marks are not deducted for errors or omissions.

b   For each of the stages, select the band descriptor that most closely describes the evidence presented. Once the best fit has been selected:

— where the evidence almost matches the level above, award the higher mark from the range

— where the evidence just meets the standard described, award the lower mark from the range

— where the evidence completely matches the highest level band descriptor for any stage, award full marks for that stage

Detailed marking instructions

Stage 1: identifying an appropriate research topic in a music technology context, and produce an outline specification

The candidate must:

♦ identify a music technology context with sufficient scope for investigation and analysis, experimentation, and synthesis

♦ produce an outline project specification that clearly justifies why they chose their topic, and gives an overview of the project, a timeline, proposed resources, and projected outcomes

Criteria for stage 1	Mark
The topic is highly appropriate and relevant, and allows for a high degree of scope for investigation and analysis, experimentation, and synthesis. The project specification is highly appropriate, and provides clear justification of topic selection and a comprehensive overview of the project	5
The topic is appropriate and relevant, and allows for a good degree of scope for investigation and analysis, experimentation, and synthesis. The project specification is appropriate and provides justification of topic selection and a good overview of the project.	4
The topic is mostly appropriate and relevant, and allows for a reasonable degree of scope for investigation and analysis, experimentation, and synthesis. The project specification is mostly appropriate, and provides some justification of topic selection and a reasonable overview of the project.	3
The topic and project specification are inconsistent, with limited scope for analysis, exploration, and synthesis.	2
Incomplete	1
No evidence	0

Additional guidance

To award high marks, the candidate should clearly identify and justify a topic that is highly appropriate and relevant.

The candidate should provide a sufficiently detailed outline specification that gives them a framework to develop and implement the project, and includes:

♦ an overview of their intentions

♦ a timeline detailing realistic timescales for completing project tasks, as well as scheduling of recording sessions and logistic concerns

♦ proposed resources, including reference materials, hardware, and software

♦ the projected outcomes

Stage 2a: investigating and analysing technology skills, techniques, and processes, and relevant musical analysis as appropriate

The candidate must provide evidence of:

♦ a clear identification of investigated and analysed skills, techniques, and processes
♦ an in-depth investigation and analysis of identified skills, techniques, and processes
♦ media files they have investigated and analysed

Criteria for stage 2a	Mark range
Completed to a high standard, demonstrating a comprehensive and detailed investigation and analysis of identified music technology skills, techniques, and processes, including relevant musical analysis as appropriate	9–10
Completed to a good standard, demonstrating a detailed investigation and analysis of identified music technology skills, techniques, and processes, including relevant musical analysis as appropriate	7–8
Completed to a reasonable standard, demonstrating some investigation and analysis of identified music technology skills, techniques, and processes, including relevant musical analysis as appropriate	5–6
Completed to an inconsistent standard, with little investigation and analysis of identified music technology skills, techniques, and processes, including relevant musical analysis as appropriate	3–4
Incomplete	1–2
No evidence of investigation and analysis	0

Additional guidance

To award high marks, the candidate must include an insightful and detailed investigation and analysis of the music technology skills, techniques, and processes that are used in their chosen topic. The candidate should clearly annotate where in the piece of audio or music the techniques, skills or processes they are investigating and analysing is used. They should include relevant musical analysis as appropriate and use concepts and language from the music and/or technology tables, and other technical language (for example, describing controls and settings on effects and processors).

Criteria for stage 2b: experimenting with music technology skills, techniques, and processes

The candidate must provide evidence of:

♦ short media files and detailed descriptions, demonstrating experimentation with identified skills, techniques and processes

Criteria for stage 2b	Mark range
Completed to a high standard, demonstrating comprehensive experimentation with identified music technology skills, techniques, and processes	9–10
Completed to a good standard, demonstrating wide-ranging experimentation with identified music technology skills, techniques, and processes	7–8
Completed to a reasonable standard, demonstrating some experimentation with identified music technology skills, techniques, and processes	5–6
Completed to an inconsistent standard, demonstrating little experimentation with identified music technology skills, techniques, and processes	3–4
Incomplete	1–2
No evidence of experimentation	0

Additional guidance

To award high marks, the candidate's work should closely reflect what they discovered through their investigation and analysis. The candidate should provide short examples of where they have experimented with skills, techniques and processes, and note any adaptations they made to accommodate different hardware, software and recording locations.

Stage 2c: synthesising investigation, analysis, experimentation, and drawing conclusions

The candidate must provide:

♦ a summary, linking investigation and analysis, and experimentation, making recommendations and drawing conclusions based on evidence, detailing the impact on their own practice

Criteria for stage 2c	Mark range
Completed to a high standard, demonstrating a comprehensive synthesis of investigation, analysis, and experimentation, drawing robust conclusions based on clear and effective evidence	9–10
Completed to a good standard, demonstrating a wide-ranging synthesis of investigation, analysis and experimentation, drawing convincing conclusions based on effective evidence	7–8
Completed to a reasonable standard, demonstrating some synthesis of investigation, analysis, and experimentation, drawing sound conclusions based on relevant evidence	5–6
Completed to an inconsistent standard, with little synthesis of investigation, analysis, and experimentation, drawing one or two conclusions based on limited evidence	3–4
Incomplete	1–2
No evidence of synthesis	0

Additional guidance

To award high marks, the candidate should have developed comprehensive links between their investigation and analysis, and their experimentation with skills, techniques, and processes. They should draw robust conclusions based on their findings, with a reflective narrative detailing the impact their findings had on their own practice.

Stage 3: organising and presenting, including using information from a range of sources

The candidate must provide evidence of:

♦ the completed report, containing material produced in stage 1 and stage 2, organised and presented in a suitable and appropriate format, including suitable references to sources of information

Criteria for stage 3	Mark
The project is well-structured and is presented to a high standard, demonstrating a high level of awareness of appropriate structure. A wide range and variety of relevant and reliable sources are referenced, comprehensively supporting candidate investigation and analysis, experimentation and synthesis.	5
The project is well-structured and is presented to a good standard, demonstrating a good awareness of appropriate structure. A range of relevant sources is referenced, supporting most aspects of candidate investigation and analysis, experimentation and synthesis.	4
The project is structured and is presented to a reasonable standard, demonstrating some awareness of appropriate structure. A number of sources are referenced, supporting some aspects of candidate investigation and analysis, experimentation and synthesis	3
The project is poorly structured and is presented to an inconsistent standard, demonstrating little awareness of appropriate structure. A minimal number of sources are referenced, providing little support to candidate investigation and analysis, experimentation and synthesis.	2
The project is incomplete, or poorly presented. Sources are not referenced or are unreliable.	1
No evidence	0

Additional guidance

To award high marks, the candidate's project should:

♦ be well-structured
♦ maintain focus on their specified project outcomes
♦ develop in a logical and convincing manner

They should clearly annotate references to all sources and present them in an appropriate format, for example, Harvard.

For example, the candidate could document the project through a video presentation, using screen capture software with voice-over to help describe the exploration of evolving advanced synthesis techniques, (as this may be difficult to document and/or describe in sufficient detail in a written format). In this example, referencing could be provided as a separate list although the volume should be the equivalent of 2,500 to 3,000 words.

Instructions for candidates

This assessment applies to the project—research for Advanced Higher Music Technology.

This project—research is worth 40 marks. This is 30% of the overall marks for the course assessment.

It assesses the following skills, knowledge and understanding:

♦ autonomous working and independent thinking skills
♦ project management skills
♦ investigation and research skills in the context of music technology
♦ critical listening skills

The project—research has three stages:

Stage 1 'identifying and outlining a topic' has 5 marks.
Stage 2 'investigating and analysing, experimenting, and synthesising' has 30 marks.
Stage 3 'organising and presenting' has 5 marks.

Your teacher or lecturer will let you know if there are any specific conditions for doing this assessment.

In this assessment, you have to produce a report on a topic drawn from a music technology context of your choice. You should use independent thinking, research and critical listening skills to investigate and analyse, experiment with, and synthesise music technology skills, techniques, and processes. You should present your findings in a suitable format. Suitable formats include a report with audio and/or video samples, podcast, web page, presentation, or screencast.

Your report should have approximately 2,500 to 3,000 words. If you choose to submit your project in another format, it should be the equivalent volume of evidence.

Before you begin
You should discuss the project with your teacher or lecturer before you begin, to ensure that your research allows you to demonstrate all of the following technical skills.

Autonomous working and independent thinking skills
♦ working without guidance and supervision
♦ rephrasing, refining, and improving responses independently
♦ integrating
♦ analysing
♦ synthesising
♦ evaluating

Project management skills

♦ producing an outline project specification
♦ defining timelines
♦ managing resources
♦ projecting outcomes
♦ tracking progress
♦ evaluating project outcomes

Investigation and research skills in the context of music technology

♦ identifying an appropriate research topic in a music technology context
♦ using information from a range of text and/or digital sources
♦ investigating and analysing music technology skills, techniques, and processes
♦ experimenting with music technology skills, techniques, and processes
♦ synthesising your investigation and analysis and experimentation, and drawing conclusions
♦ organising and presenting

Critical listening skills

♦ analysing audio recordings and production techniques, including relevant musical analysis where appropriate

Stage 1: identifying an appropriate research topic in a music technology context, and produce an outline specification (5 marks)

You must:

♦ identify a music technology context with sufficient scope for investigation and analysis, experimentation, and synthesis
♦ produce an outline project specification that clearly justifies why you chose your topic, and gives an overview of the project, a timeline, proposed resources, and projected outcomes

To achieve high marks you should clearly identify and justify a topic that is highly appropriate and relevant.

You should provide a sufficiently detailed outline specification that gives you a framework to develop and implement the project, and includes:

♦ an overview of your intentions
♦ a timeline detailing realistic timescales for completing project tasks, as well as scheduling of recording sessions and logistic concerns
♦ proposed resources, including reference materials, hardware, and software
♦ the projected outcomes

Stage 2: investigating and analysing, experimenting, and synthesising (30 marks)

You must provide the following in a suitable format:

♦ an in-depth investigation and analysis and experimentation, with clearly identified skills, techniques, and processes
♦ short media files that you have investigated and analysed
♦ a high-level summary (synthesis) that:
— links your investigation and analysis with your experimentation
— makes recommendations and draws conclusions based on your evidence
— details the impact on your own practice within music technology

Stage 2a: investigating and analysing technology skills, techniques, and processes, and relevant musical analysis as appropriate

To achieve high marks for **stage 2a** (investigating and analysing) you must include an insightful and detailed investigation and analysis of the music technology skills, techniques, and processes that are used in your chosen topic. You should clearly annotate where in the piece of audio or music the technique(s), skill(s) or process(es) you are investigating and analysing is used. You should include relevant musical analysis as appropriate and use concepts and language from the music and/or technology tables, and other technical language (for example, describing controls and settings on effects and processors).

For example, you could investigate and analyse complex sound design techniques in contemporary action film sequences. You could comment on layering techniques, mix processes, such as pitch shifting, compression, automation, and your analysis of sound sources that contribute to the final effect.

2b: experimenting with music technology skills, techniques and processes

To achieve high marks for **stage 2b** (experimenting) your work should closely reflect what you discovered through your investigation and analysis. You should provide short examples of where you have experimented with skills, techniques, and processes, and note any adaptations you made to accommodate different hardware, software, and recording locations.

For example, you could experiment with single point stereo mic'ing techniques that are used in contemporary classical recording to capture ensembles in sympathetic acoustic spaces. You should use the contemporary practices, skills and techniques you investigated and analysed in stage 2a. To demonstrate a comprehensive range of experimentation in this example, you could make use of stereo arrays such as X/Y, ORTF, NOS, M/S, A/B, Blumlein, Faulkner Phased Array, and Decca Tree. You should consider room acoustics, ensemble, placement, and contemporary practices.

2c: synthesising investigation and analysis, experimentation and drawing conclusions

Synthesis is the process of combining two or more elements or sources to form a new whole and draw conclusions.

To achieve high marks for **stage 2c** (synthesis) you should develop comprehensive links between your investigation and analysis, and your experimentation with skills, techniques, and processes. You should draw robust conclusions based on your findings, with a reflective narrative detailing the impact your findings had on your own practice.

For example, you could investigate and analyse both minimal and large-scale drum mic'ing techniques as part of stage 2a. After you have conducted your own experimentation, you could:

♦ develop arguments for and against each practice
♦ provide conclusions based on the impact your findings had on your own practice
♦ make recommendations on the appropriateness of each approach in different contexts

Stage 3: organising and presenting, including using information from a range of sources (5 marks)

You must provide evidence of the following:

♦ the completed report, containing material produced in stage 1 and stage 2, organised and presented in a suitable and appropriate format, including suitable references to sources of information

To achieve high marks for **stage 3**, your project should:

♦ be well-structured
♦ maintain focus on your specified project outcomes
♦ develop in a logical and convincing manner

You should clearly annotate references to all sources and present them in an appropriate format, for example, Harvard.

You could document the project in a report including audio and/or video samples, podcast, webpage, presentation, or screencast.

For example, you could document the project through a video presentation, using screen capture software with voice-over to help describe the exploration of evolving advanced synthesis techniques, (as this may be difficult to document and/or describe in sufficient detail in a written format). In this example, you could provide referencing as a separate list, although the volume should be the equivalent of 2,500 to 3,000 words.

Final checks

Check your work to make sure you have completed all stages of the project. The following evidence is required:

♦ your identification and justification of a suitable research topic and indication of scope for investigation, within a music technology context
♦ your outline project specification
♦ a report on your investigation and analysis, experimentation, and synthesis
♦ relevant media files that demonstrate your experimentation

Let your teacher or lecturer know when you have completed the project.

Administrative information

Published: August 2023 (version 2.0)

History of changes

Version	Description of change	Date
2.0	Research and projects re-introduced as separate components in session 2023-24.	August 2024

Note: you are advised to check SQA's website to ensure you are using the most up-to-date version of this document.

Security and confidentiality

This document can be used by SQA approved centres for the assessment of National Courses and not for any other purpose.