UWE Bristol | University of the West of England

PROGRAMME SPECIFICATION

Part 1: Basic Data	
Awarding Institution	University of the West of England , Bristol
Teaching Institution	University of West of England and Taylor's University
Delivery Location	University of the West of England, Bristol
Faculty responsible for programme	Environment and Technology
Department responsible for programme	Computer Science and Creative Technologies
Modular Scheme Title	Environment and Technology
Professional Statutory or Regulatory Body Links	Joint Audio Media Education Support (JAMES) APRS
Highest Award Title	BSc(Hons) Audio and Music Technology
Default Award Title	
Interim Award Titles	BSc Audio and Music Technology Dip HE Audio and Music Technology Cert HE Audio and Music Technology
UWE Progression Route	n/a
Mode(s) of Delivery	Full time and Sandwich with Foundation year
Codes	**UCAS: J93A** **UCAS:**
	ISIS2: J932 **ISIS2:**
	J93A
Relevant QAA Subject Benchmark Statements	Engineering
CAP Approval Date	15 January 2019
Valid From	September 2019
Version	5

Part 2: Educational Aims of the Programme

The programme in Audio and Music Technology has the following general aims:

- To produce graduates prepared for careers as individuals or within organisations in which technology is applied to the creation or distribution of music and sound within the creative industries.

- To provide students with an industry-focused learning experience, which will allow them to develop their musical and production skills in a professional context, and which addresses their academic, professional, social and cultural development.

The programme in Audio and Music Technology has the following specific aims:

- To award an honours degree in Audio and Music Technology and produce graduates who have the ability to make a contribution to companies engaged in the use, design and production of music or audio systems, including film, theatre and other arts.

- To educate students in the use and application of technology in creative and performance arts – specifically audio and sound engineering.

- To enable graduates to design and engineer audio and music systems especially in the use of computing and digital technologies in an audio context.

In addition to the general and specific aims stated above, the option modules have been selected to allow students to tailor their course to suit their specific interests and chosen career path.

Part 3: Learning Outcomes of the Programme

The focus of the foundation year (level 0) is on the acquisition both of appropriate academic skills and relevant subject knowledge to allow students to develop and progress through level 1,2 and 3 in relation to knowledge and understanding, cognitive, subject specific and study skills.

The programme provides opportunities for students to develop and demonstrate knowledge and understanding, qualities, skills and other attributes in the following areas:

Learning Outcomes	Teaching, Learning and Assessment Strategies
A Knowledge and Understanding	
A Having successfully completed this programme, students will be able to: 1. Describe engineering processes and applications with particular reference to audio systems using real and abstract quantities. 2. Explain the application of computing and other digital technologies to a range of audio-related and music-related practices. 3. Identify symbols, notation and language used in conventional music practice. 4. Recognise musical instruments both visually and aurally and identify a range of musical genres from the Western Art tradition and from contemporary music. 5. Identify applications of music and audio technologies in other domains including moving image and multimedia contexts.	**Teaching/learning methods and strategies:** Throughout, the learner is encouraged to undertake independent reading both to supplement and consolidate what is being taught and learned and to broaden their individual knowledge and understanding of the subject. Independent use of the recording studio is encouraged throughout the degree and is a requirement for UFCFG4-30-2 Audio Recording. This independence is developed first in UFCFC4-30-1 Audio Engineering where fundamental knowledge and understanding is gained through specific guided tasks. Computer-based tasks are tackled in a similar manner whereby practical sessions in the earlier years of the degree provided specific assistance with clearly defined tasks. Later on in the degree this transitions to encourage leaners to seek out solutions using a variety of sources.

Part 3: Learning Outcomes of the Programme

	Level 3 options are designed to promote awareness of the wide range of professional and employment opportunities for all music technology graduates.
	Assessment: The outcomes are assessed in core modules through a variety of methods. Where appropriate examinations are used, principally to test knowledge of theoretical concepts. Coursework is used extensively and offers the opportunity for students to demonstrate their understanding in a number of ways including the writing up of laboratory investigations and recording projects and more general essay-type activities.

B Intellectual Skills

B Having successfully completed this programme, students will be able to: 1. Apply logical thinking and the use of symbolic languages to evaluate the relationships between real and abstract quantities in the context of problems that arise in engineering. 2. Develop problem-solving strategies in musical and technical contexts. 3. Interpret acoustic and electrical theory in the context of the recording studio, performance events and other relevant scenarios. 4. Evaluate the application of business, marketing and other professional practice to a range of products and vocations including the creative industries, product development and software engineering.	**Teaching/learning methods and strategies:** Intellectual skills are developed through tutorials and practical sessions that stimulate students' critical, analytical and problem-solving abilities. Computer programming skills are developed to support a means of exercising students' problem-solving skills in individual and group-based activities. During music studio sessions the students have the opportunity to rehearse their problem-solving and analytical skills by appraising a range of possible solutions to modern recording problems and determining the most appropriate technique for the creation of professional sound recordings. Business skills are developed and embedded across a range of modules rather than being delivered through dedicated modules. This is due to the wide range of business destinations in which our graduates could find themselves. For example, business concerns in the music industry are developed in music recording modules and the business of software engineering is covering in the computer programming related modules. **Assessment:** Intellectual skills 1 and 2 are assessed mainly through coursework and examination throughout the award. Intellectual skills 3 and 4 are assessed by coursework and examination mainly within UFCFG4-30-2 Audio Recording as well as UFCFC4-30-1 Audio Engineering. The project module, UFCF96-45-3 Music Technology Project, with its assessment based on a substantial report and significant focused practical activity, further develops intellectual skills, particularly skill 2

C Subject, Professional and Practical Skills	

C   Having successfully completed this programme, students will be able to:
 	
  1. Manage the use of computing and recording studio technologies in the creation of music and audio recordings and other products.
 	
  2. Analyse sound and music both aurally and through technical processes using a range of representations.
	Teaching/learning methods and strategies:
	
	The ability to work with music systems in a professional practical manner and the application of mathematical techniques to problems associated with music systems are major aims of the award.
	
	Tutorials consolidate material introduced in the lecture environment, which together with computer laboratory practice using appropriate software, facilitate interpretation of theory to practical problems.
	
	Students are encouraged to work to professional timescales using footage sourced from professional broadcasters, and work with a range of industry-standard hardware, software and middleware systems to provide a professional context to their work.
	
	As discussed above, independent learning is developed across the three levels of undergraduate study broadly through project-based coursework tasks. Analysis of the physics and acoustics of musical instruments applied to audio recording is also developed through a practical and research based approach in UFCFN5-15-3 Instrument Recording Investigation.
	
	Throughout the degree, listening skills are developed through lectures, tutorials and practical sessions. These listening skills range from musical skills developed at Level 1 in UFCF86-30-1 Music Concepts which introduces or consolidates students' musical skills. Listening is embedded in all modules to evaluate the results of all audio-based activities from music recording to post-production environments in UFCFD4-15-3 Audio Post Production.

	Assessment: The possession of these skills is demonstrated by the development of practical studio and laboratory work, coursework, presentations and examinations. The practical nature of the skills to be acquired means that some are specifically addressed by particular modules.
D Transferable Skills and other attributes	

D   Having successfully completed this programme, students will be able to:
 	
  1. Communication skills: to communicate orally or in writing.
	Teaching/learning methods and strategies:
	
	1. Communication skills are developed through a variety of methods and strategies including the following:
	
	  • Students maintain laboratory log books

2. Self-management skills: to manage one's own time; to meet deadlines; to work with others.
3. IT skills in context: to use software tools in the context of application development.
4. Logical reasoning and problem-solving skills: To undertake analysis and interpretation of information in the context of the computing, technology and music disciplines.
5. Problem formulation: To express problems in appropriate notations.
6. Progression to independent learning: To gain experience of, and to develop skills in, learning independently of structured class work. For example, to develop the ability to use on-line facilities to further self-study.
7. Comprehension of professional literature: to read and to use literature sources appropriate to the discipline to support learning activities.

- Students participate in electronic conferences, workshops, and groupwork sessions.
- Students participate in discussion tutorials
- Students present research topic findings in tutorials
- Students participate in individual tutorials
- Students respond to feedback both formative and summative

2. Self-management skills are developed through a variety of methods and strategies including the following:

- Students conduct self-managed practical work
- Students participate in practically-oriented tutorial laboratory sessions
- Students work through practical work-sheets in teams
- Students participate in electronic group-working tutorials

3. Students arriving on this programme tend already to be fairly fluent in IT skills. This is developed further within the context of the recording studio which makes heavy use of computing software as a core skill for the programme and in the following ways:

- Students conduct self-managed practical work
- Students participate in experimental investigation tutorials
- Students work through practical work-sheets in teams
- Students make use of online teaching materials
- Students use a range of development and audio tools, methods, and packages
- Students are encouraged to practice programming to extend their skills
- Students make sustained use of the internet
- Students submit coursework via online submission systems and receive feedback via similar routes
- Students undertake computer-based exams

4. Logical reasoning skills are developed through a variety of methods and strategies including the following:

- Case-Studies are used to explore design issues with students
- Students practice design and programming
- Students sketch designs of larger systems

- Students plan and execute recording sessions and deal with unexpected problems that arise during time-critical activities

5. Problem formulation skills are developed through a variety of methods and strategies including the following:

- Students practice design and programming
- Students develop recording session plans
- Students produce stage plans for live events

6. Progression to independent learning is developed through a variety of methods and strategies including the following:

- Students are encouraged to practice all practical activities within the programme to extend their skills
- Students are encouraged to research relevant topics
- Students are encouraged to use the library, the internet and other online facilities to discover information and broaden knowledge
- Students are encouraged to articulate and reflect upon their own ideas and experiences
- Students negotiate the content and structure of their individual projects with tutors

7. Comprehension of professional literature is developed through a variety of methods and strategies including the following:

- Students are encouraged to access online material
- Material is recommended to the students in module syllabi and by tutors
- Students are required to research and refer to appropriate literature in assignments and the individual project

Assessment:

1. Communication skills are assessed mainly by examination, but also by in-class tests, essays, presentations and poster presentations.
2. The other skills are assessed through a number of similar instruments including the following:
- Individual and group projects
- Practical assignments
- Portfolio of exercises

	3. In addition self-management skills are assessed by both peers and tutors through GDP sessions and generally throughout the course.

Part 4: Programme Structure

This structure diagram demonstrates the student journey from Entry through to Graduation for a **full time student**, including: level and credit requirements, interim award requirements, module diet, including compulsory and optional modules

ENTRY

Year 1 (level 0)

Compulsory Modules

UFCFQN-30-0   Computational Thinking and Practice
UFCFPN-30-0   Information Practitioner Foundations
UFCFRN-30-0   Creative Technology Studies
UFCFTN-30-0   Web Foundations

Interim Awards

None - 120 credits at Level 0.

Successful completion of all Level 0 modules required to progress to Level 1.

Year 2 (level 1)

Compulsory Modules

UFCFF4-30-1   Introductory Audio Programming
UFCFH4-30-1   Audio Technology
UFCFC4-30-1   Audio Engineering
UFCFNL-15-1   Theory of Music
UFCFML-15-1   Exploring Music

Interim Awards

Cert HE Audio and Music Technology

Credits required: 240.
At least 100 credits at Level 1 or above. 120 credits at Level 0.

Year 3 (Level 2)

Compulsory Modules

UFCFE4-30-2 Audio Process Design & Implementation

Optional Modules (choose three from five)

UFCFA4-30-2 Applied Audio Systems
UFCFG4-30-2 Audio Recording
UFCF9G-30-2 Mobile and Physical Computing
UFCFRL-30-2 Research & Practice in Music Technology
UFCFHF-30-2 Outside Broadcast (from 2020/21)

Interim Awards

Dip HE Audio and Music Technology

Credits required: 360.
At least 100 credits at Level 2 or above. At least 120 credits at Level 1 or above. 120 credits at Level 0.

Year Out: Students on the Sandwich route complete a placement year. For students on placement, there is an opportunity to complete a professional experience or international experience module and be awarded 15 level 3 credits. These modules are shown in the option list for year 3 but are actually completed during the year out.

Year 4 (Level 3)

Compulsory Modules

UFCF96-45-3   Music Technology Project

Core Option Modules (choose at least two from four)

UFCFN5-15-3   Instrument Recording Investigation
UFCFD4-15-3   Audio Post Production
UFCF94-15-3   Software Development for Audio
UFCFV5-15-3   Live Sound

Optional Modules (remaining credits from following)

UFCFA6-15-3   Audio For Games (until 2020/21)*
UFCFE5-15-3   Game Audio Programming
UFCFL6-15-3   Sonic Art
UFCFV3-15-3   Advanced Performance
UFCF9H-15-3   Advanced Composition II
UFCFTJ-15-3   Architectural Acoustics
UFCFJF-15-3   Broadcast Practice (from 2021/22)

UFCFE6-15-3   Professional Experience
or UFCFWJ-15-3 International Experience
or UFCFVJ-15-3 Professional Development

Interim Awards

BSc Audio and Music Technology

Credits required: 420.
At least 60 credits at Level 3 or above. At least 100 credits at Level 2 or above. At least 140 credits at Level 1 or above. 120 credits at Level 0.

Highest Award

BSc(Hons) Audio and Music Technology

Credits required: 480.
At least 100 credits at Level 3 or above. At least 100 credits at Level 2 or above. At least 140 credits at Level 1 or above. 120 credits at Level 0.

GRADUATION   (* material will be covered in UFCFA4-30-2 Applied Audio Systems from 2020/21)

Part 5: Entry Requirements

The University's Standard Entry Requirements apply with the following additions:

(a) evidence of achievement in Mathematics at GCSE Grade C or equivalent

Tariff points as appropriate for the year of entry - up to date requirements are available through the courses database.

Part 6: Assessment

A: Approved to University Regulations and Procedures

It is the Award Board's responsibility to determine whether the student's attainment at level 0 is sufficient to progress to level 1.

Part 7: Student Learning

Teaching, learning and assessment strategies to enable learning outcomes to be achieved and demonstrated

At UWE, Bristol there is a policy for a minimum average requirement of 12 hours per week contact time over the course of the full undergraduate programme. This contact time encompasses a range of face-to-face activities as described below. In addition, a range of other learning activities will be embedded within the programme which, together with the contact time, will enable learning outcomes to be achieved and demonstrated.

On the Audio and Music Technology programme teaching is a mix of scheduled, independent and placement learning.

Scheduled learning includes lectures, seminars, tutorials, project supervision, demonstration, practical classes; external visits. Scheduled sessions may vary slightly depending on the module choices made.

Independent learning includes hours engaged with essential reading, case study preparation, assignment preparation and completion.

Placement learning: may include a practice placement.

Description of Distinctive Features and Support

The foundation year is common with a number of other Computer Science and Creative Technology programmes.

Class-based Activities   Classes use a range of activities. The particular mode of delivery of a module is determined by its Module Leader, and typically involves a combination of one or more lectures, practical sessions, group activities and group project work. Modules on the programme that require laboratory classes are commonly delivered by means of a combination of lecture and practicals or tutorials.

Academic Support   Academic advice and support is the responsibility of the staff delivering the module in question. Staff can be contacted outside of normal timetabled hours, either by appointment or during published "surgery" hours, in order to offer advice and guidance on matters relating to the material being taught and on its assessment.

On-line Academic Support   Extensive on-line support for this programme is provided through the University portal myUWE. This provides access to the University's e-library, which allows students to read

Part 7: Student Learning

academic journals and study-skills material. Of particular interest to students of this programme is access to Oxford Music Online, RILM, the British Sound Library, Organised Sound, Leonardo Music Journal (MIT), Tempo, twentieth-century Music, Computer Music Journal (MIT), ACM, IEEE and British Standards Online databases. The portal also gives entry to UWE's Virtual Learning Environment (Blackboard) which is used by academics to make available general information about the module delivery, handbooks, lecture notes and other materials. In addition, the portal publishes individual student timetables, marks and other aspects of the operation of the programme and University life.

Pastoral Support Pastoral care is provided through the University-wide Student Advisers, a team of staff who provide comprehensive, full-time student support service on a drop-in basis or by appointment. Advisers are trained to provide advice on matters commonly of concern, including regulatory and other matters; the Adviser will, when necessary, advise the student to seek advice to from other professional services including the University's Student Services Department or from members of academic staff.

Independent Study
Many modules require students to carry out independent study, such as research for projects and coursework assignments, and a full range of facilities are available to help students with these. The philosophy is accordingly to offer students both guided support and opportunities for independent study. Guided support, mainly in the form of timetabled sessions, takes the form of lectures, tutorials, seminars and practical laboratory sessions. Students are expected to attend all sessions on their timetable, and this is especially important because of the high content of practical work in the programme.

This route to independent learning is developed across the three levels of undergraduate study. Initially, learners are provided with specific texts and sources to provide support for lectures, tutorials, practical sessions, assignments and exams. This approach is then developed to guide students to select appropriate sources and texts for a particular task. This culminates in UFCF96-45-3 Music Technology Project where learners must first select an appropriate project task. Subsequently, they research the necessary texts and other resources required to undertake the project, and plan a significant portion of time dedicated to this project.

The development of independent study will also be assisted by the nature of the support offered in other individual modules. Typically, module leaders will provide a plan for the module indicating the activities to be carried out and the forms of learning to be undertaken during the delivery of the module, with a view to encouraging students to plan ahead and to take responsibility for managing their time and resources. This responsibility is generally weighted towards the module teaching team in the early part of the course and shift towards the student as they progress to graduation.

Computing Facilities The Faculty offers a specialised computing facility along side the general University provisions. There are multiple computing laboratories of 20 plus seats all running Macintosh based systems required for this program. The specialist laboratories are augmented with software resources and hardware equipment necessary for the delivery of the modules. One of the most popular areas within the Faculty is the Open Access laboratory. This area is never timetabled and gives students the opportunity to access machines at all times during opening hours. This is a mixed environment consisting of Macintosh, PCs and Unix workstations.

Professional Contexts The teaching staff on the programme are drawn from a range of backgrounds to support the varied activities undertaken within the programme. These included those with pure academic backgrounds, research and professional practitioners from audio-related industries. This balance enhances the student experience and employability prospects.

Part 8: Reference Points and Benchmarks

QAA subject benchmark statements
The Audio Music Technology programme falls within the cognate area of the QAA Engineering benchmark. The Engineering Benchmark Statement contains statements of the standards expected of graduates at threshold levels. Graduates of this programme will be able to meet the required standards to meet the

Part 8: Reference Points and Benchmarks

benchmark. In addition, some elements of both the Computing and the Music benchmark statements have been influential such as Programming fundamentals (Appendix B Computing) and Music technology and acoustics (Sections 3.14 and 3.15 Music).

University strategies and policies
The development of this programme reflects well institutional policies and is fully consistent with the University's commitment to 'make a positive difference to our students, business and society'.

This programme supports the University's Strategic Partnership themes

STUDENT AND ACADEMIC SERVICES

FOR OFFICE USE ONLY

First CAP Approval Date	June 2015			
Revision Approval Date		Version	1	
	31 January 2017		2	
	16 January 2018		3	Link to RIA (ID 4402) Link to RIA (ID 4620)
	29 May 2018		4	Link to RIA (ID 4767)
	15 January 2019		5	Link to RIA (ID 5020)
Next Periodic Curriculum Review due date				
Date of last Periodic Curriculum Review				