

# Griffith College

Coláiste Uí Ghríofa

in collaboration with

Pulse College

**Award Title: Bachelor of Arts (Honours)**

**Programme Title: Bachelor of Arts (Honours) in  
Audio and Music Technology**

**July 2017**



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## Introduction

This document presents a collaborative proposal by Griffith College and Pulse College for a Bachelor of Arts (Honours) in Audio and Music Technology. It is proposed that the programme would lead to a level 8 award on the National Framework of Qualifications (NFQ) and consist of 210 ECTS credits. It is intended that candidates who complete the first 60 ECTS of the programme would be eligible for a Certificate in Audio and Music Technology minor award at level 6 on the NFQ. A related proposal document in respect of the Certificate programme accompanies this submission document.

The BA (Hons) programme is designed for full-time delivery over three years using two taught semesters each year. The learners' professional development is also directed over the summer months through their creation of portfolios of practice and their completion of graded client based professional projects. This particular model of learner development and engagement with the audio and music industry has proven most successful on the College's similarly structured collaborative BA (Hons) in Music Production.

Both institutions have previous experience of delivering programmes leading to QQI awards at levels 6, 7 and 8 on the NFQ. As with other Pulse College and Griffith College collaborative programmes, the BA (Hons) in Audio and Music Technology programme will be operated in accordance with the "Quality Assurance and Enhancement (QAE) Policies, Procedures, Practices and Guidelines" (QAE Manual) of Griffith College.

The BA (Hons) in Audio and Music Technology programme shares 30 ECTS of its Stage 1 module content with the BA (Hons) in Music Production programme. This provides a common framework for music composers and audio and music technologists. The remaining 180 ECTS of this programme develops the learners' specific skills in audio and music technology across its many industry applications – in live sound, film, games, etc.

Both Colleges are satisfied that there is a strong demand for the programme from learners and employers. This is evidenced in the growing demand for Pulse College's existing Diploma programme in Audio and Music Technology, which the College intends to replace with the proposed BA (Hons) and Certificate programmes.

Award:	Bachelor of Arts (Honours)
Programme:	Bachelor of Arts (Honours) in Audio and Music Technology
NFQ Level:	8
ECTS Credits:	210

## 1. PROVIDER DETAILS

Registered QQI Provider	
Name	Griffith College
Address	South Circular Road, Dublin 8

Contact For Validation	
Name:	Dr. Tomás Mac Eochagáin
Title:	Director of Academic Programmes
Address:	Griffith College, South Circular Road, Dublin 8
E-Mail:	<a href="mailto:tomas@griffith.ie">tomas@griffith.ie</a>
Phone:	(01) 4150447 / (087) 9034361

Programme Leader (Academic / Professional)		
Name:	Ken Haughton	Niall McMonagle
Title:	Programme Director	Programme Director
Addresses:	Pulse College, 20 Ringsend Road, Dublin 4.	Pulse College, 20 Ringsend Road, Dublin 4.
E-mail:	<a href="mailto:kenhaughton@windmillanerecording.com">kenhaughton@windmillanerecording.com</a>	<a href="mailto:niall@windmillanerecording.com">niall@windmillanerecording.com</a>
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Provider Type	Private Consortium
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## 1.1 Contextual Information

### 1.1.1 Brief Description of the Provider's Organisation and Management

#### Griffith College

Established in 1974, Griffith College (GC) is one of Ireland's leading independent higher education institutions with an annual learner population in excess of 6,000. The College provides a wide range of undergraduate and postgraduate programmes validated by Quality and Qualifications, Ireland (QQI). A number of its academic programmes are also validated by Heriot-Watt University or jointly validated by Nottingham Trent University (NTU) and QQI.

In the case of disciplines involving separate external recognition, the College's QQI accredited academic programmes are also recognised by bodies such as the Honorable Society of the King's Inns, the Irish Institute of Legal Executives (IILEX), the National Union of Journalists and the Institute of Designers in Ireland.

In addition to providing academic programmes at levels 6 to 9 on Ireland's National Framework of Qualifications (NFQ), the College also prepares learners for a wide range of examinations leading to membership of professional bodies, for example the Association of Chartered Certified Accountants (ACCA), the Institute of Certified Public Accountants of Ireland (ICPAI) and the Law Society of Ireland. Training programmes in professional skills development are also provided in a number of the College's faculties, which prepare learners for awards from industry sector bodies such as City and Guilds, Avid, Cisco etc.

The College delivers full-time and part-time academic and professional programmes from its three separate centres in Ireland. The College's main campus is located on Dublin's South Circular Road on a seven-acre historic site formerly known as Griffith Barracks. Its centre in Cork is located on the former Marymount campus on Wellington and its centre in Limerick City is located on O'Connell Avenue. The College also delivers programmes nationally through the use of external rental facilities, on an in-company basis and online.

Griffith College's various activities are directed and managed by its board of directors, management board, Academic and Professional Council (APC), heads of faculty, programme directors and administrative managers. The College's academic and professional policies, procedures and practices are monitored and approved by the College's APC and by the external oversight and direction provided by national and international academic peers and related regulatory bodies.

The following table gives a summary of the key organisational structures and responsibilities involved.



<b>Management Organ</b>	<b>Composition / Responsibility</b>
<b>Board of Directors</b>	Executive and non-executive directors:  <i>Overall responsibility for the strategic direction and financial management of the College's activities and inter-institutional arrangements.</i>
<b>Management Board</b>	Executive directors, chief financial controller and other senior managers:  <i>Operational management organ of the College.</i>
<b>Academic and Professional Council (APC)</b>	College President, Director and Head of Academic Programmes, Heads of Faculty, Head of Academic Administration, Programme Director Representatives, Learner Representatives, Head of Research Committee, Head of Teaching and Learning Committee, Librarian, Students' Union President:  <i>Overall academic management of the College and all inter-institutional arrangements with accreditation agencies, validating bodies and collaborative partners. The College's quality assurance and enhancement policies, procedures, practices and guidelines are approved by QQI (i.e. QAE Manual).</i>
<b>Heads of Campus / Centres</b>	Individual managers of the Cork and Limerick campuses:  <i>Responsibility for the operational, financial and academic management of the centre / campus. Other campus / centre staff members have reporting lines to management organs within the College as a whole.</i>
<b>Faculties / Programmes</b>	Heads of Faculty, Programme Directors, Year Heads, Module Leaders and Programme Administrators:  <i>Management of academic programmes. External examiners and verifiers assist in directing the management of externally validated programmes.</i>
<b>Students' Union (elected yearly)</b>	President of the Students' Union Sports Officer, Welfare Officer, Entertainments' Officer and Students' Union Manager:  <i>Provides a forum for coordinating learner activities through its societies and clubs. Provides formal representation and advancement of learner interests through its officers and network of elected representatives at College and programme level.</i>

## **Pulse College**

Established in 1990, Pulse College provides high quality professional training and education programmes in audio, music, film, gaming and animation. These include QQI degree programmes in music production and film, certificate programmes in games, and a master's programme in writing music scores for film.

The College's two-year diploma programme in audio and music technology leads to certification by City and Guilds in addition to respected industry vendor qualifications from Avid (ProTools 101-310 expert level), Apple Logic and Final Cut Pro (Apple). Since 2009, the College has successfully delivered degree accredited programmes, initially in association with the University of Central Lancashire (UCLAN) and later in collaboration with Griffith College and DIT. The College's current collaborative undergraduate programme in association with Griffith College include a BA (Hons) in Music Production, BA (Hons) in Film and TV Production and a Certificate in Music Production for Games. The College's collaborative programme with DIT leads to an MA in Scoring for Film and Visual Media.

Pulse College is committed to providing world-class education and training. As such, it offers courses that are relevant, up-to-date and subject to rigorous and continuous re-evaluation and improvement. The College is a member of an elite group of Avid Pro Schools. As one of the first Pro Schools in Europe, Pulse College plays an active role in the development of the Pro Tools worldwide curriculum. Instructor conferences are held yearly and at least two members from the College attend. This gives an opportunity to discuss best practice and all aspects of training in an international forum. This ensures that the College's curricula and related training continue to reflect global developments.

Pulse College is committed to playing a lead role in the development of Ireland's creative digital industries in music production, film and gaming. The organisation's business success, both nationally and internationally is actively supported by Enterprise Ireland and the Digital Hub. The College received recognition from Ulster Bank in 2009 as a finalist in their Business Achievers' Award. In 2015, on its first year of delivery, their MA in Scoring for Film and Visual Media was ranked number five in the world by the influential USA website <http://musicschoolcentral.com>.

The proposed BAAMT degree reflects a natural step in the evolution of the College's collaborative partnership with Griffith College, bringing together the combined experience of both institutions in the provision of higher education programmes in the creative digital industries. As with the existing GC / PC collaborative programmes, learners on the BAAMT will benefit from their integration with other Griffith College learners, taking classes in both campuses and sharing the same educational resources and wider educational experience, from library and labs to societies and clubs.

Pulse College's Windmill Lane Recording Studios are considered to be one of the most famous recording studios in the world. This three storey, 12,000 sq. ft. facility is synonymous with U2

and associated clients including The Rolling Stones, R.E.M., Hozier, Nile Rodgers, Ellie Goulding, Ed Sheeran, Rudimental, Kylie Minogue, The Cranberries, and Riverdance.

Quality assurance in respect of the programme will be governed by Griffith College's Quality Assurance and Enhancement: Policies, Procedures, Practices and Guidelines (QAE Manual). These address all aspects of programme design, management and delivery in respect of the collaborative programme and have been approved by QQI. The quality assurance processes allow for continued input and review of existing syllabi, resources and teaching methods to ensure their relevance to emerging industry requirements, leading to sustained employment for graduates.

Griffith College and Pulse College have an established track record of delivering collaborative programmes in accordance with QQI approved quality assurance and enhancement procedures. In this regard, the internal management roles and responsibilities of programme directors, year heads, lecturers, programme administrators and the external management roles of external examiners and verifiers are fully understood.

The proposed BAAMT programme will be delivered fully in accordance with Griffith College's QAE Manual.

### **1.1.2 Outline of the provider's mission and strategy**

#### **1.1.2.1 Educational Philosophy and Readiness for Change**

Griffith College's stated mission is 'pursuing excellence in applied education'. The College has a track record of delivering high quality education that serves the learners' best interests in both the short and long term. The College's programmes are designed, monitored and updated to reflect academic and industry developments in order to prepare capable, confident and grounded graduates for employment and professional life.

The College recognises the particular importance of working closely with industry professionals in order to align and deliver appropriate programme learning outcomes. The College and its learners benefit hugely from the extensive experience of its teaching team. This includes full-time research-active academics, industry specialists and many staff who continue to combine both roles in their professional lives.

The College actively embraces the National Framework of Qualifications (NFQ) and sees it as providing welcome clarity for staff and learners alike with regards to the particular knowledge, skills and competencies being advanced on each of its programmes. This commitment is evident in the alignment of programme and module learning outcomes to national standards and in the realisation of learning outcomes through appropriate teaching, learning and assessment methods.

The College has established its own centre to support the quality of its higher education teaching - the Centre for Promoting Academic Excellence (CPAE). This centre provides a special purpose postgraduate award (20 ECTS) which is specifically designed to support the College's lecturers in their design, delivery and assessment of higher education. The centre also provides postgraduate and masters programmes in training and education to both internal and external candidates involved in higher education and professional training nationally.

The College is currently advancing its research activities with many of its staff pursuing doctorates in their professional discipline or alternatively in relation to their roles as educators.

The College's philosophy is to provide career choice and progression into the professions for its learners. The College is committed to effective programme delivery which is responsive to learner needs, enabling students to advance their knowledge, skills and competencies in their chosen career discipline. Programme learning outcomes are intentionally focused on learner-based output quality measures relevant to emerging industry needs and opportunities.

Continuing developments in higher education with respect to quality assurance and enhancement procedures, learner profiles and pedagogical practices are actively embraced by College staff and serve to directly advance the students' educational and career interests.

#### 1.1.2.2 College Mission, Values and Vision

In 'pursuing excellence in applied education', the College's mission reflects both its existing practice and its continuing search for best practice. This search for advancement for learners and the College is progressed through pedagogically informed educational research and practice. The choice of the word 'pursuing' intentionally reflects both an existing practice and a continuing search for best practice.

Delivering on this mission variously involves:

- a commitment by all staff to learner development
- programme learning outcomes advanced by robust teaching, learning and assessment methodologies
- supporting learners in their progress
- academic staff members remaining ambitious for their learners at all times

This vision also includes extending learning opportunities through greater exchange and integration opportunities with industry partners, extending the College's research base and the increased provision of blended and online learning supports.

The applied nature of the education reflects the common professional focus of both colleges whereby learners seek to advance their careers through the successful completion of career oriented programmes.

With respect to the current programme, both colleges recognise the importance of providing a learning development path that is relevant for learners, giving them a quality experience that will prepare them for current and future trends and equipping them for the new realities they will face in their professional practice. This programme considers new directions in digital technology and market interests in the media industry, providing a blend of academic and skill-based learning which will address learner needs and develop competences in these areas.

Currency, relevance and quality of teaching are indispensable concomitants of stakeholder value in particular as regards employability of graduating learners. This is a major strength of the collaboration between Griffith College and Pulse College, arising as a result of the direct engagement of associated staff members who are, and remain, active professionals working in their fields.

#### 1.1.2.3 College Strategic Aims

Griffith College's strategic aims and development plans are determined by the management board in association with the departments and faculties responsible for their implementation. Short, medium and long-term goals are agreed and reviewed annually against approved key performance indicators. Key specific aims relating to the ongoing development of the College's academic and professional activities include:

- The development and management of strategic partnerships with professional bodies involving the design, development and provision of nationally (and internationally) accredited programmes
- Establishing and maintaining international linkages with reputable universities and colleges to facilitate learner access, progression and transfer
- Recognising and supporting the growing research activities of its academic staff at doctoral and post-doctoral level
- Engaging in government tenders, for example Springboard, ICT Skills etc.
- Developing the College's e-learning and blended learning capabilities through its informed application in the light of best-practice
- Supporting and resourcing an open, inclusive quality enhancement approach with respect to the evaluation of programmes and all related academic processes
- Advancing the College's institutional autonomy beyond its existing devolution of validation sub-processes in line with its experience and track record.

#### 1.1.3 Brief outline of the programmes currently provided

Griffith College provides its academic and professional programmes through constituent faculties, collaborative partners and schools. These include faculties in Business, Computing,

Law, Media, Design, Education, Music and Drama, with the Business Faculty also having an associated Graduate Business School.

The College also provides academic and professional programmes through the specialist departments and schools shown below.

<b>Department / School</b>	<b>Programmes Nature of provision / Sample Programmes</b>
<b>Professional Accountancy School</b>	Preparation programmes in professional accountancy (e.g. ACCA, CPA, IATI)
<b>Professional Law School</b>	Preparation programmes in law (e.g. King's Inns, Law Society of Ireland)
<b>Leinster School of Music and Drama</b>	Postgraduate Diplomas in Music and Drama Education. Grade examination systems in music and drama
<b>Centre for Promoting Academic Excellence</b>	MA, Postgraduate and Special Purpose Awards in Training and Education

These faculties and schools provide undergraduate and postgraduate programmes leading to major qualifications and related awards at levels 6 to 9 on the NFQ. Some of the College's programmes are delivered in association with partners in industry or other educational institutions. Examples of College programmes delivered with the support of partners are shown in the following table.

<b>Partner Institution</b>	<b>Programmes</b>
<b>Pulse College / Windmill Lane Academy</b>	BA (Hons) in Music Production Certificate in Music Production for Games BA in Film and TV Production
<b>ISME - Irish Small and Medium Enterprise Association</b>	Special Purpose Certificate in SME Management
<b>Institute of Certified Public Accountants in Ireland</b>	Special Purpose Certificate in Advanced Taxation and Planning
<b>Globe Business College, Munich</b>	BA (Hons) in Business Studies
<b>Sports Council of Ireland</b>	Certificate in Dual Career Development (Sport)
<b>Institute of Legal Executives in Ireland</b>	Certificate in Legal Studies Diploma in Legal Studies and Practice

The College also provides a wide range of English language training programmes accredited nationally by ACELS – Accreditation and Certification of English Language Services.

A list of the College’s programmes is included in Appendix 1 of this document. The College maintains a current list of its programmes on its website at [www.griffith.ie](http://www.griffith.ie).

## 1.2 Outline of the Proposed Programme

Title	Award	ISCED	Duration	If Embedded is it an exit award?
BA (Hons) in Audio and Music Technology	Bachelor of Arts (Honours)	0211	3 Years FT	n/a
<b>Proposed Enrolment</b>	<b>First Intake (date)</b>		<b>Second intake (date)</b>	
	2017		2018	
<b>Maximum number of intakes per annum</b>			1	
<b>Will the programme enrol international learners? (yes/no)</b>			Yes	
<b>Will the programme accept Erasmus exchange students?</b>			Yes	

Proposed Enrolment over Five Years					
	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Minimum</b>	20	20	20	20	20
<b>Maximum</b>	50	50	50	50	50

Detail any articulation arrangements involving advanced entry	Maximum number of learners	Minimum number of Learners
There are no articulation arrangements involved	n/a	n/a

Names of Centres Where the Programmes are to be provided	Maximum Learners	Minimum Learners
Griffith College, South Circular Road, Dublin 8	50	20
Pulse College, 20 Ringsend Road, Dublin 4	50	20

<b>Target Learner groups</b>	Target learners are secondary school leavers with technical background and passionate and proven interest in audio and/or music technology
<b>Proposed countries for provision</b>	Ireland only
<b>Delivery mode:</b>	Full-time
<b>The teaching and learning modes</b>	Class and lab based learning with studio based workshops tutorials.

<p><b>Brief synopsis of the programme (e.g. who is it for, what is it for, what is involved for learners, what it leads to)</b></p>	<p>The programme presents a level 8 honours degree programme consisting of 210 ECTS. It is intended for school leavers and learners from a variety of backgrounds who have a keen interest in music and audio and related technologies. Whilst a love for music is often a powerful motivation, musicianship is not an entry requirement. There is a considerable emphasis on critical listening and audio analysis, investigations of form and aural training as well as instruction in music theory. It is mandatory for learners to examine critically and contextually the works of key practitioners.</p> <p>The learners' passion for "<i>all things audio</i>" is developed as they are trained to create, track, overdub, mix and master all sorts of sounds daily. The course content features recording techniques, sequencing, sampling, sound processing, live performance technologies, sound design and research skills. The skills gained through this course will allow graduates to move into a variety of careers within the creative industries such as music recording, live sound, post-production and sound design for the web and multimedia.</p>	
<p><b>Summary of staffing requirements (the details are provided in the module descriptors)</b></p>	<p>WTE</p>	<p>Qualifications and Experience</p>
<p><b>Outline the physical resource requirements (the details are provided in the module descriptors)</b></p>	<p>3</p>	<p>At least one person with specific qualifications in the area of Music Technology at Master of Arts level or greater per learner cohort.</p>
<p><b>Outline specifications for the ratio of learners to teaching staff.</b></p>	<p>Staff to learner ratio</p>	<p>Learning activity type</p>
	<p>1:20 to 1:50</p>	<p>Lecture and Seminars</p>
	<p>1:20 to 1:25</p>	<p>Tutorials and Labs</p>

Work placements for which credit is allocated			
Placement	Stage	Credit	Hours
n/a			

Programmes being replaced (applicable to applications for revalidation)		
Code	Title	Last Enrolment Date
n/a	n/a	n/a



### **1.2.2 Embedded Programme**

The BA (Hons) in Audio and Music Technology contains a minor award leading to a level 6 Certificate in Audio and Music Technology comprising 60 ECTS. This programme consists of Modules 1-8 from Stage 1 of the major programme. Details of this related programme are provided in a separate document.

### **1.2.3 Stand-alone Module leading to a Minor Award**

There are no stand-alone modules leading to a minor award.

## 2 EDUCATIONAL AND TRAINING OBJECTIVES AND MINIMUM INTENDED PROGRAMME AND MODULE LEARNING OUTCOMES

### 2.1 Programme Aims and Objectives

The Bachelor of Arts (Hons) in Audio and Music Technology is a 210 ECTS programme that is designed to provide learners with the following comprehensive and detailed knowledge, skills and competences:

- **Audio and Music Production:**  
Graduates from the programme will enter into industry with up-to-date, competitive skills in sound recording, editing, music production, live performance technologies, sound reinforcement, sound design and audio post-production. Working both independently and collaboratively, learners will produce a high volume of completed work across the three years of the programme. This activity, combined with the technical skills outlined above, seeks to produce adaptable creative practitioners capable of moving with the on-going technological change that defines the professional audio industries.
- **History and theory:**  
Learners will develop a detailed and informed knowledge of the concepts in history and theory that support music and audio production technologies. Upon completion of this degree the learner will be able to demonstrate advanced independent judgment, analytical skills and a clear, critical engagement with a wide range of audio production environments.
- **Industry and professional skills:**  
The programme will involve the seamless integration of teaching with real-world industry experience through the engagement of lecturing staff drawn from industry, guest speaker master-classes and site-visits. Continuous professional engagement over the summer months involving personal and client based projects will complement the learners' academic and technical development. This sustained academic and industry preparation will produce learners who are industry-ready as audio professionals.
- **Concept development and creativity:**  
A sustained focus on creativity is fostered throughout the programme, with learners developing advanced skills in concept generation, development and realisation of professional audio and music productions for a wide range of contexts and audiences.

### 2.2 Rationale for the choice of QQI named Award Stem Sought and for the named Award Title

The proposed programme requires learners to develop both artistic and technical skills achieving the standards necessary to create professional audio and music technology productions. Creativity through analysis, experimentation, evaluation and reflection are core to the knowledge, skills, and competencies developed on the programme. The programme is mapped against the QQI awards standards in Art and Design.

As a 210 ECTS programme for learners entering the discipline, it is proposed that the programme leads to a BA (Hons) in Audio and Music Technology. The title specifically reflects the coverage of both music and non-music related sound and its technological production in order to present a succinct description of its intended purpose.

### 2.3 QQI Awards Standards Used

In developing the learning outcomes both at programme and module level, the team referenced the Awards Standards in Art and Design as published by QQI and ensured the learning outcomes are consistent with these standards.

### 2.4 Minimum Intended Programme Learning Outcomes

On successful completion of the Bachelor of Arts (Honours) in Audio & Music Technology (BAAMT) programme the graduate will be able to:

#### Knowledge Breadth

PLO\_1 Demonstrate detailed knowledge and understanding of the underlying concepts and processes underpinning the professional performance and production of music and organised sound across a wide range of contemporary visual media and digital formats.

PLO\_2 Exhibit a thorough and critical understanding of selected musical forms, styles and genres and their psychological and social contexts.

#### Knowledge Kind

PLO\_3 Creatively apply knowledge of the underlying concepts and functionality of the hardware and software of computer-based audio-visual production systems across a wide range of disciplines.

#### Know-How & Skill Range

PLO\_4 Competently conduct sophisticated research, drawing on contemporary developments, and communicate the related specifications and findings clearly to a range of academic and professional audiences.

#### Know-How & Skill Selectivity

PLO\_5 Demonstrate proficiency in the application of traditional and evolving music production techniques through their creation and realisation of challenging work.

PLO\_6 Demonstrate safe, effective and ethical work practices using digital audio workstations and professional recording studios through their setting, testing and completion of work to professional standards.

#### Competence Context

PLO\_7 Produce a live event to a professional standard incorporating the advanced use of multi-media technologies.

### **Competence Role**

- PLO\_8 Work competently in a self-directed manner, individually, in peer-relationships, and as a team leader in a variety of interdisciplinary and unfamiliar environments.
- PLO\_9 Competently initiate, negotiate and manage audio production projects involving complex workflows and multiple personnel to exacting deadlines.

### **Competence Learning-to-Learn**

- PLO\_10 Demonstrate professional learning development through a comprehensive portfolio of their work showing personal experimentation, analysis, reflection and progression evidenced in increasingly sophisticated creative projects.
- PLO\_11 Advance their professional and or academic careers as they choose either through direct employment / self-employment as professional music and audio producers or by undertaking further postgraduate studies.

### **Competence Insight**

- PLO\_12 Exhibit an individual flexible approach to their productions which is informed by, but not limited to, research and reflection on leading theorists and practitioners.

## **2.5 Minimum Intended Module and (where applicable) stage learning outcomes.**

The Bachelor of Arts in Audio and Music Technology programme consists of three sequential and related stages – with the first 60 ECTS of Stage 1 representing the minor award of Certificate in Audio and Music Technology. Each of the three stages of the degree serves to advance the learners' knowledge, skills and competences with the modules in earlier stages directly underpinning those in later stages

Programme learning outcomes are supported by all programme modules and reflect the totality of learner attainment on completion of stage 3. Module learning outcomes are also outlined in respect of each component module (see Module Descriptors in Section 6 and 7). The contribution of each of the stages to the overall programme is broadly outlined below. (The related minor award – Certificate in Audio and Music Technology is outlined in an accompanying document.)

Stage 1 provides learners with introductory level technical competence and insights to the field of audio and music technology with a focus on developing technical skills. On completion of Stage 1, the learner will have a working knowledge of a digital audio workstation and practical experience of a working studio, although at this level they would not be expected to lead or work without direction.

Upon completion of Stage 1 learners will:

- Be able to operate a DAW at a basic level.
- Have an applicable knowledge of the rudiments of music theory.
- Have an applicable knowledge of music sampling and synthesis.
- Have an essential understanding of Pro Tools and Logic software.
- Be able to use basic hardware competently in a recording studio.
- Be familiar with recording methods for sound design.
- Have an enriched understanding of the history of music recording.
- Be able to use live performance software and demonstrate basic composition skills.
- Demonstrate an understanding of the history of contemporary recorded music.

Stage 2 builds on the skills of the previous stage through the development of the application of these competences. Further aspects and applications of audio and music technology will be introduced in the fields of live sound and studio design.

Upon completion of Stage 2 learners will:

- Be able to operate a DAW at an advanced level.
- Have an in-depth knowledge of music technology techniques and available software.
- Have an applicable knowledge of acoustics and studio design.
- Creatively use sound design recording and mixing.
- Have an applicable knowledge of Sound Reinforcement systems and operation.
- Work as a sound technician in a live scenario under direction.
- Be able to work effectively and efficiently in a recording environment.
- Be able to research independent topics and present the results in an academically credible manner.

In Stage 3 learners will be enabled and expected to demonstrate an ability to integrate the different elements of the programme in an independent and creative way. By this stage the technical aspects of audio and music technology will have been established and the focus will be specialisation with a view to working in the field as independent professionals.

Upon completion of Stage 3 learners will:

- Be able to manage a DAW at a professional level.
- Use standardised mixing skills in multiple disciplines.
- Manage the work flow for a commercial client to exacting professional standards.
- Be employable as an Audio Engineer for any 'live' scenario.
- Be equipped with the professional knowledge to start a small business.
- Have an advanced applied knowledge of sound design.
- Have an advanced knowledge of music sampling and synthesis.
- Be able to conduct both qualitative and quantitative research in specialist areas.
- Have developed a strong ability to think independently and critically.

## 2.6 Mapping the MIPLOs against the QQI Awards Standards and demonstrating consistency

This information is provided in the mapping document which is included as part of this application, showing the mapping of the MIPLO's to the QQI Award standard.

## 2.7 Comparing the MIPLOs with those of Comparable Programmes

A small number of music technology, music recording and production programmes are currently offered in Ireland at levels 6, 7 and 8, with each programme having its particular emphasis and orientation. All programmes enjoy considerable demand. The programmes include:

Institute	Comparable Programme (Degree)
N.U.I Maynooth	BA Music Technology
IADT	BA Creative Music Production
Limerick I.T.	BSc Music Technology and Production
Dundalk I.T	BA Production of Music and Audio

Less related programmes in music performance and music education are also provided by Irish universities and colleges.

Particular characteristics of the proposed BAAMT include its access to and close association with industry professionals, its location in Dublin and its focus in the preparation of graduates for the industry.

## 2.8 Mapping the MIMLOs against the QQI Awards Standards

Minimum intended module learning outcomes (MIPLOs) represent the detailed implementation of the programme learning outcomes. The team has focused on how the modules deliver the teaching, learning and assessment needed to ensure the programme learning outcomes are achieved.

A detailed mapping of the module learning outcomes (MLOs) to the programme learning outcomes has been completed and is included in Appendix 2. This, in conjunction with the mapping included in 2.6 above, allows us to reference a direct link between the award standard, the MIPLOs, the MLOs and on to assessment.

Engaging in this top-down development, deciding on the correct award standard, appropriate MIPLOs and then designing associated MLOs which are adequately assessed, allowed the team to ensure consistency throughout the programme in the constructive alignment of assessment to award standards.

### 3 PROGRAMME CONCEPT, IMPLEMENTATION STRATEGY, AND ITS INTERPRETATION OF QQI AWARDS STANDARDS

#### 3.1 Rationale for Providing the Programme

The size of the Irish audio industry in terms of economic value is significant and has been recognised by the current government as a new source of growth. The audio-visual sector has been identified as a key area for developing sustainable enterprise within Ireland. According to the Irish Government's "Action Plan for Jobs" 2016:

*"There are a number of actions that recognise the potential for the audio-visual sector to contribute 5,000 new jobs by 2020 and in 2016 the Irish Film Board will increase employment in the sector by up to 1,000 through supports for up to 32 projects including feature documentaries, animation, TV drama and short films." Given the structure of the industry, these new jobs will provide opportunities for professionals at all levels, as directors, producers and commissioners of work, to those involved in junior and senior technician roles.*

According to a report produced by Deloitte and commissioned by the Irish Music Rights Organisation entitled "The Socio-Economic Contribution of Music to the Irish Economy", the Irish music industry contributes over €470 million to the economy and supports more than 11,510 jobs in Ireland. In 2012 Irish consumers purchased over 3 million music CDs and listened to over 3 billion hours of radio broadcasts. They also downloaded over 7 million singles and over 1 million albums. Digital sales between 2008 to 2012 grew from €8m to over €13m.

According to the PWC Global Entertainment and Media Outlook:

*"Music streaming is taking a rapidly-rising share of overall global recorded music revenue."*

*"A major tipping-point was passed in 2015 when digital recorded music revenue exceeded physical recordings for the first time."*

*"Driven by digital growth, total global music revenue will rise at a 2.1% CAGR to US\$47.7bn in 2020."*

Add to this the change in emphasis into the world of live performance, *"artists are now more dependent on earnings from live music performance than ever before. This shift from recorded music to live has changed the economics of the industry, with record companies extending their revenue streams to include live performance, and concert promoters expanding into artist management. Total live music revenue will rise at a 3.0% CAGR through 2020."*

Irish music and performers have achieved universal recognition with artists like The Corrs, Enya, U2, Christy Moore, The Script, Hozier and Kodaline demonstrating that a small nation can make its voice (and music) heard on the world's stages. Their achievements have been exceptional taking into consideration that Ireland has only 0.08 per cent of the world population and 0.3% (2016 - 0.272% GDP PPP) of the world's gross domestic product.

Using this information and feedback from learners, graduates, academics and contacts in industry, the Faculty have developed this proposed programme to address this area specifically.

### 3.2 Education and Training Needs Met by the Programme

This programme aims to develop graduates who have a sound knowledge and skillset of Audio and Music Technology across a range of disciplines. That is what the industry needs. In order to develop those skills there is a large emphasis on the creating and producing music and audio recordings to a professional standard.

This programme prepares learners for entry to the workplace as industry specialists. Through the Windmill Lane studios, they will be exposed to some of the most respected and world-renowned practitioners in the industry. These experts are regularly invited to deliver “master classes” in specialist areas. Previous guest lecturers include producer Flood (New Order, U2, Depeche Mode) and arranger Fiachra Trench (Paul McCartney, Van Morrison, Elvis Costello).

The combined academic and industry-leading resources will benefit learners in a number of ways:

- The professional recording facilities available to learners are among the best available in Europe. There are four studios in Windmill Lane. Some previous clients include Lady Gaga, Ed Sheeran, Rudimental, Hozier, Ellie Goulding, Nile Rodgers, U2, Metallica and AC/DC. Ongoing access to a commercially active recording studio provides unrivalled work experience opportunities.
- Access to the College facilities provided by GC and the Leinster School of Music and Drama (LSMD) in respect of lecture theatres, labs, library, music rooms, recording studios, recital hall, clubs and societies along with the programme management expertise of its teaching and administrative staff.
- As a recognised Apple and Avid training centre, the programme includes the preparation for vendor qualifications. These qualifications are highly regarded by the media industries and are therefore much sought after by learners and industry freelancers alike.
- As industry leaders, our industry links are extensive and worldwide. We have access to renowned experts available for seminars in this and related disciplines. This will add to the learner experience as a whole.

### 3.3 How the programme and its intended programme learning outcomes were conceived, researched and developed

Since 1990 Pulse College has delivered third level programmes in audio and music technology leading to internationally recognised qualifications. What started as a one year, City and Guilds Course developed into a two-year, full-time and part-time programme, offering awards at FETAC Level 6, City and Guilds Level 3 and professional industry vendor qualifications from Avid and Apple. This experience coupled with the delivery of the College’s BA (Hons) in Music Production informed the development of this programme. While this is a new programme for QQI and for Pulse College and Griffith College, it represents the evolution and development of over 25 years of related programmes.

The Learning Outcomes for the programme are directly informed by the College’s experience and track record of preparing learners for professional employment in the industry, and from the continuous engagement the College maintains with professional recording artists.



### **3.4 Interpretation of the Awards Standards and Research Supporting the Programme's Aims, Objectives and MIPLOs**

The Award Standards *'represent an elaboration of the generic descriptors of the national framework of qualifications'* and *'provide general guidance for articulating the learning outcome associated with a particular field of learning'*. They are presented under the eight categories of knowledge, skills and competencies outlined in the NFQ. It is College policy to develop programmes using the ECTS Users Guide 2015 published by the Publications Office of the European Union.

The College's mapping of MIPLOs to the QQI Arts and Design Awards standards are detailed in Appendix 2. These address the distinctive level 8 nature of the programme and the knowledge, skills and competences required of graduates of honours degree programmes.

### **3.5 Profile of Learners that would be Enrolled (Target Learners)**

The BA (Hons) in Music and Audio Technology is intended for the person who listens to music and constantly wonders, "how do they make that sound?" rather than simply enjoying the music. In this regard learners undertaking the programme may already be performing musicians, DJs, avant-garde computer music composers or technicians, with all of them sharing keen aural capabilities.

It is taken for granted that applicants will have a proven interest in music and its associated technologies and perhaps the performing arts in a wider context. Knowledge of the basic use of computers and music software is a pre-requisite. It is not essential for the applicant is an expert in these areas before starting the programme. More important is a proven interest in music making, sound recording, sound design and music production. A willingness to explore new ideas is vital to getting the most from the course, alongside inherent creativity and a positive attitude to study.

The programme aims to develop the essential practical skills and knowledge required to work in the dynamic area of music and audio technology. The use of the recording studio and computer technologies are central to the course curriculum, as they become increasingly important tools in the delivery of sound and music.

### **3.6 Alignment of the Programme with the Professional/Occupational Profile if the programme is a Professional One**

Not applicable to the current programme.

### **3.7 Involvement of Employers and Practitioners in the Design of Vocationally Oriented Programme: Process and Outcomes**

Pulse College's operation of the Windmill Lane commercial recording studios gives it continuous, privileged direct access to employer requirements. This has positioned the College as Ireland's leading source of music technology employees for the industry with graduates being sought for external employers and national and international bands.

Specification and direct feedback in relation to employer requirements was provided by the continuous stream of clients using the recording studios in respect of the skill set required from producers, engineers and support staff. These include large employers such as RTE and BBC, independent studios, producers and artists.

Particular feedback was sought from Donie Stritch and Paul Bradley (Head of Audio, Assistant head of Audio, RTE Radio) in relation to Audio Post-Production workflows. Locky Butler (Slate Studios) provided advice in relation to sound design modules and emphasised the need for entrants into the workplace to be skilled DAW operators.

Larry Hogan, (CEO of 'Dublin Studio Hub', Producer and Musician) was consulted on studio based content. He outlined the need for audio professionals to be capable of handling large-ensemble live recordings. This skill is in short supply, but is becoming more popular due to budget constraints and the rise in demand for live video content for band websites and social media pages.

We also consulted at length with producer, engineer and musician Billy Farrell. He stressed the importance for learners to be taught a level of music theory which would enable them to use music programming software while also helping them to appreciate the fundamentals of music theory.

The proposed honours degree programme prepares candidates for immediate employment as professional audio and music technologists with the ability to initiate, design and complete projects on behalf of clients to a professional standard. The related Certificate in Audio and Music Technology provides learners with more limited knowledge, skills and competences.

### **3.8 Comparison with Other Programmes (of other providers)**

As mentioned in section 3.3 above, this programme has been informed by both colleges' previous delivery of related programmes at undergraduate and postgraduate level. The related programmes offered by other institutions (section 2.7) each present individual strengths. In the case of this degree proposal, the distinguishing feature relates to the integration of commercial professional recording studios and the direct engagement with professional clients.

### **3.9 Evidence of Support for the Introduction of the Programme**

See section 3.7 above.

The College's graduates have consistently secured employment in almost every area of the audio industries and many are regarded as industry leaders.

### **3.10 Evidence of Learner Demand for the Programme**

Pulse College has shown that there is a growing demand for accredited training in audio and music technology through its delivery of internationally accredited programmes leading to certification by City and Guilds. The increasing role of the NFQ in Ireland's higher education along with Irish accreditation is expected to further increase demand. As outlined earlier, industry developments and related employment opportunities suggest increased demand for audio professionals at all levels, from certificate to honours degree level and beyond.

Current CAO point requirements in respect of Irish programmes typically average 370 to 400 points. All existing programmes have limited places and are traditionally over-subscribed.

The proposed programme is also expected to be of interest to mature learners with previous experience of the industry. These candidates would be considered in accordance with Griffith College’s quality assurance procedures in respect of the accreditation of prior certified and experiential learning (APL and APEL).

The proposed programme is expected to attract continued interest from a range of candidates as follows:

- Instrumentalists who wish to move away from performance into the area of technology and recording.
- DJs who wish to further develop their creative and technical skills.
- Learners wishing to work in a studio environment and the field of music technology.
- Learners wishing to work in areas of visual media such as film, television and games.
- Song writers and musicians wishing to learn how to record and work in a studio environment.
- Learners interested in other multi-media disciplines such as sound design, audio editing, audio processing etc.

### 3.11 Evidence of Employment Opportunities for Graduates

As mentioned in section 3.3, the Irish Government’s “Action Plan for Jobs” 2016 aims to create 5,000 new jobs in the Audio-Visual sector by 2020.

### 3.12 Planned Intake

The proposed enrolment was outlined in section 1.2.1 above as shown in the following table.

<b>Proposed Enrolment over Five Years</b>					
	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
<b>Minimum</b>	20	20	20	20	20
<b>Maximum</b>	50	50	50	50	50

These figures ensure the viability of the programme and the ability of the Faculty to ensure the learner experience is good. (These figures are separate from those relating to the certificate).

### 3.13 Five-year Plan for the Proposed Programme

The planned intake is given in 3.12. For any one cohort, the minimum number of students proposed is 20 and the maximum is 50. We estimate growth over the five years to ensure maximum numbers for any intake by year three. In estimating income and costs, we have taken the lowest number of learners to ensure viability of the proposal. Having completed the financial analysis using estimated costs and comparison with other BA music programmes running in the Faculty, the College is satisfied that 20 learners is a viable cohort. Feedback from the College’s Irish and international marketing

departments in respect of the proposed programme indicates that a cohort of between 20 and 50 learners is achievable over the proposed five years, with intakes of 50 achievable by year three.

### **3.14 Mechanisms to Keep the Programme Updated and How it will be Updated in Consultation with Stakeholders**

Under Griffith College's Quality Assurance and Enhancement procedures every programme is reviewed annually and an Annual Programme Report (APR) is produced. Learners are surveyed each semester to get their views on each module relating to content, delivery and learner experience. Lecturers complete a Module Report Form at the end of each module giving their feedback on how the delivery went. The Programme team engages annually with employers for feedback on how graduates have developed and in relation to the material being delivered. All of this feedback is included as part of the APR and considered by the programme team before making recommendations.

Recommendations that do not require QQI approval, such as updating case studies or assessment instruments, can be implemented immediately. Significant changes not requiring a programmatic review, such as changing the assessment weighting in a module, can be requested from QQI for the next delivery of the programme. Modifications that require a more substantial evaluation are referred to the next programmatic review for consideration at that point.

The Annual Programme Report is considered by the Faculty team submitted to the Director of Academic Programmes who meets with the Faculty team to discuss the proposals. Any resource issues that arise are then dealt with by the Management Board of the College.

Any updates to programme documents arising from this process are managed by the Head of Academic Programmes to ensure that programme documentation is up-to-date and accurate. The Head of College Administration ensures that changes that require amendments to college systems, e.g. a change in assessment weighting will be reflected in the College's Student Information System.

From a Quality Enhancement perspective, it is also necessary to monitor the programme delivery and the student experience. The ECTS Users Guide again sets out clear guidelines as to best practice in this area.

The following indicators can be used for evaluating the quality of ECTS implementation:

- Educational components are expressed in terms of appropriate learning outcomes, and clear information is available concerning their level, credits, delivery and assessment;
- Studies can be completed in the time officially allocated to them (i.e. the workload associated with an academic year, a semester or a single course component is realistic);
- Annual monitoring examines any variations in patterns of achievement and results gained and follows up with appropriate revision;
- Students are provided with detailed information and advice so that they can follow progression rules, exploit options for flexible pathways and select educational components at an appropriate level for their qualification;
- Students are informed promptly of their results.

(ECTS Users Guide, p50)

The first bullet point is addressed by the current process of validation and by continuous monitoring of the information supplied to learners both when applying and when being inducted into the programme. The Annual Programme Report produced for all academic programmes in the College directly addresses the second, third and fourth bullet points in that it reviews learner results and feedback from learners and lecturers. Recommendations are then made based on an analysis of that information. Continuous assessment results are given to the learners within the Faculty during the course of each module and summative examination results are released by the Examinations Office which supplies an official annual transcript to each learner.

### **3.15 Compliance with Special Validation Criteria or Requirements attached to the Applicable Awards Standards.**

There are no special validation criteria or requirements attached to the applicable awards standards that we are aware of.

### **3.16 Other Matters**

Griffith College and Pulse College have previous experience of delivering related validated degree and masters programmes in the creative arts. The Colleges' experience of delivering the BA (Hons) in Music Production, BA (Hons) in Film and TV Production, Certificate in Music Production for Games and MA in Scoring for Film and TV Production (a collaboration between Pulse College and D.I.T.) will directly benefit the delivery and management of the proposed programme, as will both Colleges' experience of delivering other higher education programmes.

## **4 ACCESS, TRANSFER AND PROGRESSION PROCEDURES, CRITERIA AND ARRANGEMENTS FOR THE PROGRAMME**

### **4.1 Information to be made available to learners about the programme**

Information is made available to learners about the programmes during marketing and recruitment as well as at induction prior to the start of each intake. The College Programme Information Policy is set out in QA C1 in the College QA Manual. A copy of the core information provided is also included in Appendix 4 of this document.

During Induction learners are introduced to their Faculty staff and provided with programme information such as their timetable, assessment grid, module information, information about their Programme Director, Year Head and Programme Administrator. This is provided in written format in a Programme Handbook. See draft Programme Handbook which has been submitted with this application.

#### **4.1.1 Justification of the Programme Title**

The programme title BA (Hons) in Audio and Music Technology is a very specific and focused title. It reflects the core intended programme learning outcomes which aim to produce graduates who will work in the field of audio and music or go on to further education.

The modern-day audio professional needs to be well-versed in both audio technology and music technology. The programme title reflects this adequately.

### **4.2 Entry Procedures and Criteria for the Programme including procedure for Recognition of Prior Learning**

#### **4.2.1 Entry Procedures**

Applicants to the BA (Hons) in Audio and Music Technology programme should have obtained a minimum of grade H5 or higher in at least two higher level papers, together with a minimum of four O6 / H7 grades, including maths and either Irish or English for entry to the B.A (Hons) programme. Mature learners over the age of 23 can also apply for entry on to the programme.

All applicants are met in advance of admission by the Programme Director in order to provide them with detailed information on the programme and the nature of the workload and challenges involved. This allows applicants to make informed decisions as to the suitability of the programme for their needs and aspirations.

It is expected that demand for the programme may exceed available places. In this regard, and in line with the College's other CAO programmes, the candidates selected will have considerably more than the minimum entry points required.

The allocation of places on the programme is managed by the College's admissions office in accordance with the QQI criteria determined for the programme. The College's international department provides administrative assistance to international applicants, for example in respect of visa processing. The College also provides a scholarship scheme to assist a number of eligible learners onto its programmes.

As the demand for places on the programme may exceed available places, the College reserves the right to decline admission in line with the determinations of the course team and the College's admissions and international departments.

The College actively promotes the recognition of prior learning and has developed its access, transfer and progression procedures accordingly. The College's current policies on Recognition of Prior Accredited Learning (APL) and Recognition of Prior Experiential Learning (APEL) are outlined in the QAE Manual of Griffith College Dublin (QA C3).

The College anticipates that most its learners will be Irish students who will enter the programme in Stage 1 based on their Leaving Certificate results. Irish and international candidates seeking to access or transfer into the programme with advanced standing will be considered on a case-by-case basis in the light of their previous related formal qualifications (e.g. level, ECTS) by the College's APL committee in accordance the College's approved QA policies.

#### **4.2.2 Minimum Requirements for General Learning**

Candidates presenting with the Leaving Certificate should have obtained a minimum of grade H5 or higher in at least two higher level papers, together with a minimum of four O6 / H7 in other subjects, including maths and either Irish or English for entry to the B.A (Hons) programme.

#### **4.2.3 Minimum Requirements for Discipline Specific Learning**

Not applicable.

#### **4.2.4 Minimum Experiential Requirements (if applicable)**

There are no specific experiential requirements for entry to the programme. Applicants presenting without the required level 5 qualification but with a lower level qualification combined with experiential learning will be assessed as per QA C3 the policy on Recognition of Prior Learning.

#### **4.2.5 Minimum Language Proficiency Requirements**

All learners are required to be proficient in English. Where a candidate's mother tongue is not English, he or she is required to provide a proof of proficiency in the English language through satisfactory performance on an internationally recognised test (e.g. IELTS 6.5) or other similar English Language qualifications. Where applicants are borderline or do not have a recognised English Language qualification, they are tested in the College's English Language Centre on arrival and, subject to satisfactory performance, can be offered admission or be required to undertake English language classes until they have achieved a satisfactory competence in the language.

#### **4.2.6 Minimum Mathematical Proficiency Requirements**

Applicants should have achieved at least an O6 or H7 grade in mathematics in the Leaving Certificate with the exception of mature students and those entering via RPL.

#### 4.2.7 Pre-admission Interview

It is College policy to meet with candidates following their application to ensure that the programme is an appropriate match for the needs, capabilities and aspirations. The interview is not graded for admissions purposes, but rather serves to provide assurances for the learner and the College that the programme is an appropriate fit for their needs.

All applicants are required to present for interview, and are expected to demonstrate the following:

- A proven interest in music and music technology
- Knowledge of the basic use of computer music software
- A proven interest in music making, sound recording and sound design
- Inherent creativity and a willingness to explore new ideas
- A positive attitude and enthusiasm for the field of study
- Scholarly dedication to academic aspects of the programme
- Self-organisation skills.

The entry criteria are used to ensure that all applicants who are accepted onto the programme have the basic educational requirements to assure they can succeed and serve as a protection for learners. The purpose of the Interview is twofold: it serves to emphasise to the applicant the challenge that the programme will present and to assure the Programme Director that the applicant has the ability to succeed on the programme.

#### 4.2.8 Detail any other Criteria for Selecting Learners

The programme will cater for international learners. In some cases it can be difficult for international learners to integrate to different educational systems and practices. Pulse College and Griffith College have a lot of experience in dealing with international learners and the issues that can arise. In the area of language, as already stated, candidates are expected to have the requisite language skills. Griffith College tests all its international learners on arrival and where the need is identified English for Academic Purposes classes are supplied.



#### 4.2.9 Programme-specific RPL criteria and arrangements for Entry, Exemptions from Modules, advanced Entry and Direct Access to the Award

Summary of RPL criteria for advanced entry or access to the award (cite supporting documentation)		
<b>Module Exemptions</b>	Applicants wishing to apply for module exemptions should clearly indicate so at the time of application. All module exemptions will require the applicant to provide evidence of previous experiential learning. The process for module exemptions is set out in the Griffith College QA Handbook (QA C3, Section 5, Recognition of Prior Learning). Applicants wishing to apply for exemption should fill out the Student Record Amendment Form (QA CA1).	
<b>Advanced Entry</b>	As above, procedures for advanced entry are stated in the Griffith College QA handbook (QA C3, Section 5). There is provision for individual applicants and the Procedure on the Systematic Transfer of Groups from Potential Partner Institutions is outlined in the QA handbook (QA C3, Section 5.3). Any/all applicants for advanced entry will provide evidence or prior learning including transcripts of subjects studied and a portfolio of work. This is to allow for the learning which has taken place to be mapped against the unit/stage for which the exemption is being sought.	
<b>Prior Experiential Learning</b>	Recognition of prior experiential learning, in relation to entry requirements, is supported on this programme. Such applications arise when a candidate does not have a level 5 award or equivalent. In such cases the candidate can ask that experiential learning be assessed in relation to the entry criteria. All such applications are dealt with centrally within the Office of the Head of Academic Programmes and are governed by QA C3 Recognition of Prior Learning (RPL) Procedure and specifically section 5.2 of that document <sup>1</sup> . Such cases can be varied. Each case, in line with the policy, is assessed on its own merits. In all cases the prior certified learning and experiential learning is evaluated against appropriate Learning Outcomes. In exceptional cases where a gap is evident, the Faculty can set a piece of assessment which the candidate is required to complete to demonstrate the requisite learning in that area.	
List of Specific Arrangements for transfer from other programmes (inward) to the proposed programme		
	Programme Name, Provider	Details
<b>Award Stage</b>	BA (Hons) in Music Production, Griffith College/Pulse College	At the end of semester one, learners can transfer to the BA in Audio and Music Technology as both programmes cover similar learning in the first semester.

<sup>1</sup> <https://www.griffith.ie/about-griffith/griffith-college-qa-manual>

List of Specific Arrangements for Progression (inward) to the proposed programme		
	Programme Name, Provider	Details
<b>Award Stage</b>	QQI Level 5 award	Learners will have a minimum of grade H5 or higher in at least two higher level papers, together with a minimum of four O6 / H7 in other subjects, including maths and either Irish or English.

### 4.3 Programme-specific transfer (outward) procedures and criteria

As with transfer inward, the existing BA (Hons) in Music Production provides learners with an option for transfer on successful completion of the first semester. Learners wishing to transfer to this course must meet the specific entry requirements for the BA (Hons) in Music Production.

List of Specific Arrangements for transfer from other programmes (outward) from the proposed programme		
	Programme Name, Provider	Details
<b>Award Stage</b>	BA (Hons) in Music Production, Pulse College and Griffith College	At the end of semester one, learners can transfer to the BA in Music Production as both programmes cover similar learning in the first semester. Learners progressing to the BAMP programme must meet the music performance entry requirements of the BAMP programme.

### 4.4 Identified Transfer and Progression Destinations

Successful completion of the proposed programme will equip learners for entry to industry but will also equip them with the requisite learning to go on to study for a level 9 award in many related music technology areas.

Progression Destinations	
Programme name, Provider	Details
Master of Philosophy in Music and Media Technologies, Trinity College Dublin	A Level 9 programme focusing on musical and technological topics
Master of Science in Music Technology, Limerick I.T.	A Level 9 programme focusing on combining technological competence with artistic endeavour.
Master of Arts in Scoring for Film and Visual Media, Pulse College, Dublin and D.I.T.	A level 9 programme focusing on composition and arranging visual media.

### 4.5 Professional Accreditation of the Programme

There are no plans to seek professional accreditation for the programme.

## 4.6 Details of the Credit System used for the Programme

*“ECTS credits express the volume of learning based on the defined learning outcomes and their associated workload”* (ECTS Users Guide, p10). It is College policy to use the ECTS credit award system on academic programmes to provide benchmarking of programmes against other programmes, to provide consistency across programmes, and to assist access, transfer and progression for learners. There are several benefits in using the ECTS system. Over the last ten years the greatest change brought about by shifting the focus from curriculum to learning outcomes based on a defined credit system has been what the ECTS User Guide refers to as *“...the paradigm shift from a teacher-centred to a learner-centred approach...”* (ECTS Users Guide, p14).

In deciding the credits for each module the team had to assess the workload involved in achieving the defined learning outcomes for that module. In doing that we were aware that any assessment of workload is an estimate of the workload for a typical learner. *“It should be recognised that this represents the typical workload and that for individual students the actual time to achieve the learning outcomes will vary.”* (ECTS User Guide, p10). The Faculty, in line with College policy, continuously monitors the progress of each cohort of learners through the Year Head system and feedback from lecturers and learner class representatives. Where any weaknesses or gaps are identified these are addressed. This can happen through additional tuition or the provision of extra materials online or handout.

In this proposal, the team is proposing an estimate of 25 hours per credit and differentiates this in terms of direct contact, lectures, tutorials and learner effort in independent learning, study, research and work on assignments. In some modules there are more direct contact hours, e.g. Relational Databases has a considerable number of tutorial hours as experience has shown us that this is necessary. On the other hand, learner projects require less contact as with these the contact is to review work done and to plan and guide the learner in their independent learning.

## 4.7 Other Matters

Both institutions have previous experience of supporting learners as they access, transfer and progress into and from the College’s programmes. The Colleges also recognise that learners’ initial plans may at times have to be put on hold in order to accommodate unexpected life events such as a change of employment or a bereavement. Under these circumstances, the Colleges make every effort possible to facilitate the learners and to enable them to complete their programme of study at a time and pace of their choosing.

## 5 WRITTEN CURRICULUM

### 5.1 Outline of the Curriculum

#### 5.1.1 Stage Level Outline

The following tables outline the BA (Hons) programme organisation over the three stages.

##### Stage 1 (Year 1)

Module Name	ECTS
Music Technology 1	10
Applications Technology	10
Recording Studio Principles	10
Music for Producers 1	10
Live Music & Performance Technology 1	5
Computer Basic for A.V. Workstations	5
Sound Reinforcement 1	5
Sound Design and Foley FX	5
Online Portfolio (summer)	5

##### Stage 2 (Year 2)

Module Name	ECTS
Music Technology 2	10
Applications Technology 2	10
Music for Producers 2	10
Recording & Mixing 1	10
Live Music & Performance Technology 2	5
Research and Presentation	5
Sound Reinforcement 2	5
Sound Design & Creative Processing	5
Client Project 1 (summer)	10

##### Stage 3 (Year 3)

Module Name	ECTS
Dissertation by Practice	20
Mixing & Mastering	10
Professional Practice	5
Studio Design & Setup	5
Recording & Mixing 2	10
Audio Post Production Techniques	5
Sound Design for Games	5
Client Project 2 (summer)	15

#### 5.1.2 Rules for Electives and Their Rationale

All modules on the programme are mandatory. This ensures that all learners develop a comprehensive understanding and competence across the range and application of audio and music technologies. Individual creativity and choice is developed and reflected in the variety and interpretation of

programme assessments as learners work with clients from different musical traditions and interests, and with different recording requirements. The dissertation by practice affords and requires each learner to research, establish and demonstrate individual knowledge, skills and competences.

### 5.1.3 Module-level outline

Stage 1:

Module Title	Module Synopsis
Music Technology 1	The module introduces learners to basic principles of modern music technology. Learners will set up the hardware and software of a music production suite and learn to record, edit and mix using computer based programmes.
Applications Technology	The objectives of the module are to enable the learner to use industry standard DAW software to record and edit audio and MIDI, managing sessions from conception to final mix-down using appropriate effects, automation, corrective techniques and professional workflow.
Recording Studio Principles	This module introduces the learner to the operating principles of modern recording studios. It will give the learners an introduction to the practical issues in operating a recording system from microphone choice and techniques to basic editing and mixing techniques for final mix-down.
Music for Producers 1	This module is designed to give the learner an introduction to music theory and notation. Learners will learn to create and compose music using music technology.
Live Music and Performance Technology	This module introduces the learner to the technical and electrical aspects of Live performance. Learners will work with stage setups and learn about connectivity between music technology software and performance hardware. Relevant techniques and concepts will be exemplified clearly and demonstrated in a performance area.
Computer Basics for Audio Visual Workstations	This module introduces the learner to basic computer applications needed for an audio environment. Learners will gain a working knowledge of basic operating systems, computer hardware and networking.
Sound Reinforcement 1	The module is designed to give the learners an introduction to the theory, techniques and practices involved in implementing appropriate sound reinforcement for a live performance event.
Sound Design and Foley FX	This module will give the learners an introduction to Sound Design and Foley FX recording technology and practises. They will also learn about principles of Sound Design by way of a historical examination of the industry.
Online Portfolio	This module will give learners the skills to promote themselves and their portfolio of work using online media.

Stage 2:

<b>Module Title</b>	<b>Module Synopsis</b>
Music Technology 2	This module is designed to give the learner further knowledge into music technology. Learners will explore drum programming, samplers and sampling in addition to conducting research into virtual instruments and doing an in-class, group presentation.
Applications Technology 2	This module further develops the learner's skills in operating industry standard DAWs. This module will focus on larger recording systems and their associated hardware and develop more advanced editing practices. Organisation skills using media browsers will be explored, implementing best practice for file storage and transfer.
Music for Producers 2	This module will help the learners further develop their basic knowledge of music theory. Using music technology and theory, learners will analyse different forms and genres of music and develop their compositional and transcription skills.
Recording and Mixing 1	This module is designed to develop the learner's ability to operate professional recording equipment. Studio based tutorials and assignments will help the learners accumulate time in the studio as these skills can take time to develop fully.
Live Music and Performance Technology 2	The module provides the learner with further knowledge on how live performance systems can be programmed and performed. This will equip them with the skills needed to plan and realise a live performance.
Research and Presentation	This module aims to equip the learner with the relevant research and presentation skills that pertain to academic reading, writing and research. The module will underpin the learning required for the dissertation in stage 3.
Sound Reinforcement 2	This module will equip the learner with the foundational skills required to design, configure and calibrate a P.A. system to professional standards. Utilising prediction and analysis software, learners will develop system engineering skills and plan and realise a live event.
Sound Design and Creative Processing	This module is designed to develop the learner's creativity in the field of sound design. Learners will be required to develop sounds for a range of environments (machine, underwater, space) and how to use processing techniques to enhance and deliver their soundscapes and ideas.
Client Project 1	This module allows learners to develop their ability to work with clients in a professional manner. Learners will be required to source a client with whom they will plan and develop a project through negotiation with their tutor.

Stage 3:

Module Title	Module Synopsis
Dissertation by Practice	This module requires the learner to work closely with a tutor to complete a large piece of work. This is a project led by the learner and may focus on any area worthy of academic research. The module will help develop their creativity through research by practice and develop their critical thinking skills.
Mixing and Mastering	The module is designed to develop the learner's ability to work and deliver products to an industry standard. Learners will work across a range of musical genres to build a broad range of mixing and mastering experience.
Professional Practice	This module will develop the learner's basic ability in professional practices for audio professionals. They will develop self-marketing skills and learn the legal and ethical issues pertaining to the world of music/audio, allowing them to setup their own business and trade as freelance/sole trader professionals.
Studio design and Setup	This module provides the learner with the practical and theoretical knowledge required in the design and setup of a recording studio environment. They will learn how to capture and analyse acoustic information for a given environment and develop acoustic solutions to issues identified.
Recording and Mixing 2	This module is designed to further develop the learners' recording and mixing skills. They will learn how to manage and realise a large scale, live recording project involving multiple instrumentalists for a professional standard project. They are required to source their own clients outside of the college and produce an E.P. project with the client.
Audio Post Production Techniques	Having already developed considerable recording experience, this module will help focus their skills into the area of post-production. They will learn about the standards and practices to deliver products for film and TV to industry specifications.
Sound design for Games	This module is designed to equip the learner with the theory and practical knowledge to provide audio content for games and interact with industry middleware and audio engines. This will be developed incrementally to help the learner in the creation of dynamic sound environments that interact directly with the game software.
Client Project 2	This module allows learners to develop their ability to work with clients in a professional manner. Learners will be required to source a client with whom they will plan and develop a project through negotiation with their tutor.

## 5.2 Rationale for Curriculum Structure

The first stage of 65 ECTS credits gives learners the fundamental skills required to operate in the field of audio and music technology. These core areas are an essential element before they focus on the specialisation in stages two and three. In the second stage of 70 ECTS credits, there is a greater emphasis on developing creativity while at the same time expanding on the fundamental skills required. The third stage of 75 ECTS credits, focuses on the individual skills of the learner allowing them to choose a large portion of their own learning through research and client projects. The dissertation represents the culmination of the programme, allowing the learners to apply the learning attained in the previous stages.

### 5.3 Rationale for the programme's duration, credit allocation

The BA (Hons) programme is designed to be delivered over three years with a credit volume of 210 ECTS. This model is identical in structure to that used on the QQI approved BA (Hons) in Music Production. It is expected that learners entering the programme will have a level 5 award or higher. We have experience of delivering challenging programmes to such learners and are confident that taking 210 ECTS credits over three academic years is achievable and will meet the needs of the learners.

### 5.4 Indicative timetable and its Rationale

<b>BAAMT YEAR ONE SEMESTER ONE TIMETABLE 2016/17</b>				
<b>MONDAY</b>				
<b>Time</b>	<b>Location</b>	<b>Room</b>	<b>Module</b>	<b>Lecturer</b>
09:00 – 12:00	Griffith College	JS003	Applications Technology	Greg Clooney
12:00 – 18:00	Griffith College	JS003	Audio Practical Time	Andy Naessens
<b>TUESDAY</b>				
<b>Time</b>	<b>Location</b>	<b>Room</b>	<b>Module</b>	<b>Lecturer</b>
09:00 – 12:00	Windmill Lane	Lab 2/S1	Recording Studio Principles	Jimmy Eadie
12:00 – 15:00	Windmill Lane	Lab 2	Music Technology 1	Greg Clooney
<b>WEDNESDAY</b>				
<b>Time</b>	<b>Location</b>	<b>Room</b>	<b>Module</b>	<b>Lecturer</b>
09:00 – 12:00	Windmill Lane	Lab 2	Sound Reinforcement 1	Niall McMonagle
12:00 – 15:00	Windmill Lane	Lab 2	Music for Producers	Lenka Dobai
15:00 – 18:00	Windmill Lane	Studio 2 & 3	Studio Tutorials	Niall McMonagle / Jimmy Eadie
<b>THURSDAY</b>				
<b>Time</b>	<b>Location</b>	<b>Room</b>	<b>Module</b>	<b>Lecturer</b>
09:00 – 12:00	Windmill Lane	Lab 3	Computers for AV	Greg Clooney
12:00 – 15:00	Windmill Lane	Lab 3	Audio Practical / Tutorials	Andy Naessens
<b>FRIDAY</b>				
<b>Time</b>	<b>Location</b>	<b>Room</b>	<b>Module</b>	<b>Lecturer</b>
09:00 – 12:00	Griffith College	JS003	Audio Practical / Tutorials	Andy Naessens
13:00 – 16:00	Griffith College	JS003	Audio Practical / Tutorials	Andy Naessens



## 5.5 Integrated Learning Opportunities and Assessment in light of the MIPLOs

While there are no integrated assessments involving multiple modules, there are strong links between the constituent modules with learning and assessment in modules serving to advance the general development and proficiency of learners in related and subsequent modules.

## 5.6 Programme Teaching and Learning Strategy

The teaching and learning strategies adopted for the programme are varied and determined by the nature of the module content. Many of the modules require the development of technical skills. These are advanced in labs and studios with learners 'learning by doing' under the guidance of lecturers and supervisors. Other modules require learners to advance their musical and critical reflection skills through guided presentations by lecturers. These require the learners to engage in directed and independent learning and practice to hone their skills.

Learners will be taught using the combined teaching resources of Griffith College and Pulse College. It is proposed that group lectures, presentations and labs will take place in Griffith College, with studio teaching sessions taking place in Pulse College's professional studios. All learners will also have access to computer labs, studios and recording rooms (or pods) to advance their independent work. Learners enrolled with Griffith College are given full access to leading online platform Lynda.com. Lynda.com contains a wealth of up-to-date video tutorials from audio fundamentals and studio basics to specialist areas such as mastering audio, post-production and song writing, to name a few.

Individual learner strengths and development requirements will be identified in the course of teaching in order to ensure that the programme learning outcomes are achieved in a learner-centred environment.

The teaching and learning methods for each module are outlined in the individual module descriptors and will utilise the following:

- Formal and participative lectures
- Tutorials and presentations
- Group work and peer review
- Flipped Classroom
- Workshops and screenings
- Recording studio work
- Music production, analysis and reflection
- Practical work, including formative assessments
- Expert guest visits and lectures

The majority of the technical and musical coursework is assessed through the submission of recordings, software or related artefacts. Formative group feedback is provided through seminars and tutorials, along with individual written and verbal feedback in respect of the work produced.

## 5.7 Integration, Organisation and Oversight of Work-based learning

While there is no industry placement element in the programme, learners benefit directly through the industry based client projects they undertake in Stages 2 and 3. They also will have considerable ongoing engagement with industry professionals during their programmes through their lecturers and industry guest lecturers, in addition to observing and assisting in professional projects within Windmill Lane Recording Studios. Professional staff also fulfil a role as mentors to learners through formative assessment.

## 5.8 Programme Learning Environment

Learners on the BA (Hons) in Audio and Music Technology (and Certificate) programme will benefit from the educational campus environment offered by Griffith College comprising lecture rooms, labs, studios, recital rooms, library, canteen, students' union and related resources. Learners will also benefit from the support resources provided by academic and administrative staff, student clubs and societies.

Music production by its nature involves engaging with other musicians, clients and the recording environment. Throughout the undergraduate programme this will be fostered in an atmosphere of shared learning and growth. Studio work particularly involves working with and around others, sharing ideas and learning from one another. In this regard the professional studio resources of PC will be hugely beneficial.

Learners will also benefit from the cultural diversity afforded by Griffith College and the opportunity for student projects and interaction with learners from other creative disciplines, for example computing, design, fashion and media. In this regard it is anticipated that students will be engaged in collaborative end of year performances and showcases of student work.

It is planned that learners will attend lectures in both Griffith College and Pulse College. Recording studio assignments will all be delivered in Pulse College. Classes, lab time and lab-based assignments will be delivered at both campuses. Dedicated Mac labs will be provided at Griffith College. For compatibility, these iMac work stations are identical to those at Pulse College. Technical resources for the course will be re-assessed annually in both campuses.

The programme will be managed and operated in accordance with Griffith College's approved Quality Assurance practices procedures. In this regard:

- The programme will be managed by a programme leader who will oversee all educational and resource issues.
- Each stage of the programme will be coordinated by a year head.

Year 1: Niall McMonagle

Year 2: Jimmy Eadie

Year 3: Ken Haughton

- The alignment of curriculum and assessment with the programme learning outcomes will be managed by the Programme Director in association with lecturing team.

- The Programme Director and year heads will coordinate the input of all lecturers, overseeing the assignment schedule to ensure a consistent workload for learners and providing formal lines of communication to learners in respect of all their feedback on the programme.
- Each module will be delivered by one or more lecturers under the direction of a module leader. Programme administration in respect of attendance, registration, assignment submission and deferrals will be managed by a programme administrator.
- Year heads will have direct contact with the learner cohort each week in their role as lecturer of a key module, ensuring comprehensive guidance and support in respect of learner progress.
- A programme board comprising the Programme Director, year heads, lecturers and learner representatives will meet regularly to review, monitor and inform the on-going delivery of the programme.

### 5.8.1 Physical, Social, Cultural and Intellectual Environment

The programme will be delivered in Griffith College's Dublin campus and Pulse College's Windmill Lane Studios Campus.

#### **Griffith College**

Griffith College's main campus has over thirty lecture halls and classrooms and ten computer labs. Running a wide range of programmes across five faculties, a music school and two professional schools, the campus is a vibrant centre of learning in the heart of Dublin City. The campus also has student accommodation for over 600 which brings its own dynamic. A very active Students' Union provides supports for many clubs and societies including sports, debating, film and many more.

#### **Pulse College**

Pulse College's main campus, Windmill Lane Recording Studios, is situated in the heart of the 'Silicon Docklands' and boasts over 12,500 sq. ft. of space across three floors with 3 renowned recording studios, air conditioned classrooms, computer labs and personal or group edit suites (pods).

### 5.8.2 The Learner Experience

With learners from over seventy different countries, Griffith College and Pulse College present a global village giving learners to opportunity to engage with other cultures and make a wide variety of friends and contacts from around the world. The Colleges actively facilitate the integration of different nationalities within programmes and assessment/study groups. The Colleges emphasise the practical application of learning through the creation of artefacts, requiring learners to complete extensive practical work, both individually and in groups. The Colleges have also developed strong links with industry who support the learners' experiences through practical assessment tasks, internships and guest lecturing.

### 5.8.3 Learner Supports

Griffith College's International Office provides visa and legal information supports. The College's English for Academic Purposes Department provides language support as required, and the Students' Union provides advice on issues such as housing and social issues. The College also has a college counsellor, provided free of charge, to deal with personal difficulties which a learner might be experiencing. The College was heavily involved in the development of the Provision of Education to International Students: Code of Practice and Guidelines for Irish Higher Education Institutions (IHEQN) 2009, and has implemented the Code across the College. This will apply to learners on this programme. The College has also adopted the QQI Code of Practice for Provision of Programmes of Education and Training to International Learners (2015).

The College is also aware of the challenges faced by learners returning to education after time away in employment. In such cases, the Faculty will assess any needs that arise and provide supports both online (e.g. through Lynda.com or College-produced content) and in seminar style sessions.

Applicants with particular learning needs or disabilities are required to notify the College in advance of their enrolment to ensure that their individual needs can be suitably accommodated. Where these needs can be accommodated, the nature and extent of the individualised supports are documented and agreed.

## 5.9 Programme Specific Arrangements for Monitoring Progress and Guiding, Informing and Caring for Learners

The proposed programme will be run in accordance with Griffith College's QA manual which details policy and procedure for information provision, programme monitoring and student welfare and discipline. Information provision to learners during recruitment and at induction has been dealt with in section 4.1 above.

A College Student Handbook is also supplied and updated annually. Please see a copy of the 2016/2017 handbook included with this submission. The following are some of the headings showing the issues dealt with in that document.

- Registration
- Student cards
- Travelling to and from the College
- Campus map
- Key people to know
- Student services
- Careers office
- Student fees
- Local doctors and counselling services
- International Office
- Library
- My.gcd Intranet / College Website / Email
- Student Union
- Student feedback

- Attendance requirements
- Assessment and Exams
- Interpreting results
- Appeals
- Health and Safety
- Graduation
- Alumni
- 2016/2017 Academic Calendar

The Student Code of Conduct and Student Charter, QA J1 and QA J3, are prominently displayed in the College in poster form (information included in Appendix 5 below).

Within the Faculty, communication lines are expressly detailed to the learners at induction. For any administrative or registration issues the Faculty Administrator is contactable by phone, email or in person in the Faculty office. For module enquiries each lecturer has a one-hour timetabled slot per week to meet with learners on a one-to-one basis.

Each cohort of learners will also elect at least one class representative(s) who meets regularly with the Year Head for that cohort of learners. The Programme Director will meet formally on several occasions during the semester with the Class Representative(s). As a lecturer on the programme, the Programme Director will also get constant feedback and meetings will be held as necessary.

Programme Committee meetings take place once a semester and the class representatives are invited to attend. With international learners, English language requirements are monitored by the Programme Director and English Language support from the Griffith Institute of Languages is available if requested.

At the end of each delivery of the programme, each lecturer is asked to complete a Module Report (QA GA4) which seeks feedback from the lecturer on how the module went and seeking recommendations for improvement, if any, for future delivery of the module.

## 5.10 Programme Assessment Strategy

The programme places an emphasis on the application of the learning to professional recording requirements. Modules have a practical element where learners need to demonstrate the application of that theory to practice.

As the variety of teaching methods employed suggests, learners are presented with a range of learning environments on the programme. Additionally, they are required to undertake a range of different assignments to facilitate their assimilation and understanding of the material presented. In this way, problem areas encountered are identified and discussed thoroughly as the material is presented. Assessment informs the teaching methodology as the programme progresses.

A range of assessment methods are utilised, including:

- Assignments
- Recording projects
- Analysis of given works
- Group work
- Practical assignments
- Portfolio production
- Mixed media projects
- Unseen examinations.

Staged Assessment Development:

Stage 1	Stage 2	Stage 3
Prescriptive assessment	Prescriptive assessment	Information management
Information management	Information management	Critical Reflection & Response
	Critical Reflection	Evaluation
	Evaluation	Peer Review
	Peer Review	Adherence to industry standards and protocols

The educational alignment of programme learning outcomes to the modules in which they are advanced is shown in Appendix 2.

### 5.10.1 Continuous Assessment

Continuous assessment is used as a teaching method, assessing learning as it is occurring. The focus is on constructive learning where feedback is formative, motivational and directed at improvement.

### 5.10.2 Summative Assessment

Summative assessment is used to assess learning against expected outcomes, typically on module completion. Modules that have a final practical or written examination allow for assessment of the learners' grasp of the theoretical content of the module. Where the overall grade for the module is a combination of continuous and summative assessment then it is a College requirement that in order to pass overall, both the continuous and the summative element must be at least within the compensation range (35% to 40%).

### 5.10.3 Repeat Arrangements

Examination periods occur three times during the academic year. At the end of semester one (normally in January), at the end of semester two (normally in May), and in August when supplemental or repeat examinations are held. Learners who need to repeat continuous assessment elements can do so during the summer period. Repeat assessments are published on Moodle with information as to submission dates and modes of submission.

#### **5.10.4 Major Dissertations or Projects**

The dissertation by practice at stage 3 provides learners the opportunity to undertake a significant, specialised application of a selected project of their choice under the direction of a faculty member. This will enable learners to work to their strengths and interests, demonstrating abilities to research and provide solutions to complex problems through the synthesis of the technical, creative and cultural knowledge and skills acquired and developed during the programme. Ongoing supervision of the dissertation is undertaken by the designated supervisor and coordinated and overseen by the module leader. Completing the dissertation via this managed route will develop the learners' professionalism in the application of a range of research and project management skills and will serve to directly assist them in undertaking further research and securing employment. Other modules, particularly the recording, mixing and post-production projects at stage 2 and 3, also require learners to produce professional standard work to support their entry into employment.

#### **5.11 Samples of Award-Stage Assessment Tasks**

Sample Assessments for Stage 3 are included in Module descriptors in section 6 (6.17 – 6.23)

## 5.12 Proposed Programme and Stage Schedules: BA (Hons) in Audio and Music Technology

<b>Name of Provider</b>			Griffith College									
<b>Programme Title</b>			Bachelor of Arts (Honours) in Audio & Music Technology									
<b>Award Title</b>			Bachelor of Arts (Honours)									
<b>Stage Exit Award Title</b>			None									
<b>Modes of Delivery (FT/PT):</b>			Full-time									
Award Class	Award NFQ level	Award EQF level	Stage	Stage NFQ Level	Stage EQF Level	Stage Credits			Date Effective	ISCED Subject Code		
Major	8	6	1	6	5	65			Sept. 2017	0211		
Module Title		Semester	Module		ECTS Credits	Total Learner Effort Module (hours)			Allocation of Marks (from the module assessment strategy)			
			Status	NFQ Level		Total Hours	Contact Hours	Hours Ind. Work	C.A. %	Proj. %	Prac. %	Final. %
1. Music Technology 1		1&2	M	6	10	250	72	178		50	50	
2. Applications Technology		1&2	M	6	10	250	72	178				100
3. Recording Studio Principles		1&2	M	6	10	250	72	178	10	90		
4. Music for Producers 1		1&2	M	6	10	250	72	178		60		40
5. Live Music & Performance Technology		2	M	6	5	125	36	89			80	20
6. Computer Basics for AV Workstations		1	M	6	5	125	36	89	100			
7. Sound Reinforcement 1		1	M	6	5	125	36	89		40	60	
8. Sound Design and Foley FX		2	M	6	5	125	36	89	40	60		
9. Online Portfolio		2	M	6	5	125	36	89	100			



<b>Name of Provider</b>		Griffith College										
<b>Programme Title</b>		Bachelor of Arts (Honours) in Audio & Music Technology										
<b>Award Title</b>		Bachelor of Arts (Honours)										
<b>Stage Exit Award Title</b>		None										
<b>Modes of Delivery (FT/PT):</b>		Full-time										
<b>Award Class</b>	<b>Award NFQ level</b>	<b>Award EQF level</b>	<b>Stage</b>	<b>Stage NFQ Level</b>	<b>Stage EQF Level</b>	<b>Stage Credits</b>	<b>Date Effective</b>	<b>ISCED Subject Code</b>				
Major	8	6	2	7	6	70	Sept. 2017	0211				
<b>Module Title</b>		<b>Semester</b>	<b>Module</b>		<b>ECTS Credits</b>	<b>Total Learner Effort Module (hours)</b>			<b>Allocation of Marks (from the module assessment strategy)</b>			
			<b>Status</b>	<b>NFQ Level</b>		<b>Total Hours</b>	<b>Contact Hours</b>	<b>Hours Ind. Work</b>	<b>C.A. %</b>	<b>Proj. %</b>	<b>Prac. %</b>	<b>Final. %</b>
10. Music Technology 2		1&2	M	7	10	250	72	178		70	30	
11. Applications Technology 2		1&2	M	7	10	250	72	178				100
12. Music for Producers 2		1&2	M	7	10	250	72	178			60	40
13. Recording & Mixing 1		1&2	M	7	10	250	72	178	20	70	10	
14. Live Music & Performance Technology 2		2	M	7	5	125	36	89		50	50	
15. Research and Presentation		2	M	7	5	125	36	89		80	20	
16. Sound Reinforcement 2		2	M	7	5	125	36	89		50	50	
17. Sound Design & Creative Processing		1	M	7	5	125	36	89		100		
18. Client Project 1		2	M	7	10	250	36	189	20	80		

<b>Name of Provider</b>		Griffith College										
<b>Programme Title</b>		Bachelor of Arts (Honours) in Audio & Music Technology										
<b>Award Title</b>		Bachelor of Arts (Honours)										
<b>Stage Exit Award Title</b>		Bachelor of Arts (Hons) in Audio & Music Technology										
<b>Modes of Delivery (FT/PT):</b>		Full-time										
Award Class	Award NFQ level	Award EQF level	Stage	Stage NFQ Level	Stage EQF Level	Stage Credits	Date Effective	ISCED Subject Code				
Major	8	6	3	8	6	75	Sept. 2017	0211				
Module Title		Semester	Module		ECTS Credits	Total Learner Effort Module (hours)			Allocation of Marks (from the module assessment strategy)			
			Status	NFQ Level		Total Hours	Contact Hours	Hours Independent Work	C.A. %	Proj. %	Prac. %	Final. %
19. Dissertation by Practice		1&2	M	8	20	500	72	428	15	70	15	
20. Mixing and Mastering		1	M	8	10	250	72	178	10	90		
21. Professional Practice		1	M	8	5	125	36	89	60		40	
22. Studio Design and Setup		2	M	8	5	125	36	89		100		
23. Recording and Mixing 2		1	M	8	10	250	72	178	10	70	20	
24. Audio Post Production Techniques		1	M	8	5	125	36	89		100		
25. Sound Design for Games		1	M	8	5	125	36	89		100		
26. Client Project 2		2	M	8	15	375	36	339	20	80		

## 6 MODULES

## 6.1 Module 1: Music Technology 1

<b>Module Title</b>	Music Technology 1
<b>Module NFQ Level (only if an NFQ level can be demonstrated)</b>	6
<b>Module number/Reference</b>	BAAMT101
<b>Parent Programme</b>	BA (Hons) in Audio and Music Technology
<b>Stage of Parent Programme</b>	1
<b>Semester</b>	1 and 2
<b>Module Credit Units (FET/HET/ECTS)</b>	ECTS
<b>Module Credit number of Units</b>	10
<b>List the teaching and learning modes</b>	FT
<b>Entry requirements (statement of knowledge, skill and competence)</b>	Learner has earned Level 5 qualification. No previous music technology ability is required.
<b>Pre-requisite module titles</b>	None
<b>Co-requisite module titles</b>	None
<b>Is this a capstone module? (Yes or No)</b>	No
<b>Staff qualifications (academic, pedagogical and professional/occupational) and experience required. (staff includes workplace personnel who are responsible for learners such as apprentices, trainees and learners in clinical placements)</b>	Staff are required to have at least a Bachelor of Arts (Honours) qualification in Music Technology or related discipline. Industry experience would be a benefit but is not a requirement. Staff are expected to have the Certificate in Training and Education qualification from Griffith College or its equivalent.
<b>Staff/learner ratio per centre (or instance of the module)</b>	For lecture load, a ratio of 1:50 lecturer to learner is required and in lab sessions the maximum allowed is 1:25 The lecturer will also have 1 hour per week set aside in their timetable for 1:1 contact with learners who require it or have items they want to discuss.
<b>Maximum number of learners per centre (or instance of the module)</b>	50
<b>Duration of the Module</b>	Two Academic Semesters, 24 weeks teaching
<b>Average (over the duration of the module) of the contact hours per week.</b>	3
<b>Physical resources and support required per centre (or instance of the module)</b>	One lecture hall with capacity at least 50 and one Computer lab with capacity of 25.

Analysis of Required Learning Effort										
Effort while in contact with staff										
Classroom and Demonstrations		Mentoring and small group tutoring		Other (Specify)		Directed e-learning (hours)	Independent learning (hours)	Other hours (specify)	Work-based learning hours of learning effort	Total Effort (hours)
Hours	Minimum ratio teacher/learner	Hours	Minimum ratio teacher/learner	Hours	Minimum ratio teacher/learner					
48	1:50	24	1:12				178			250
Allocation of marks (within the module)										
						Continuous Assessment	Supervised Project	Proctored practical	Proctored Written Examination	Total
Percentage contribution							50%	50%		100%

### 6.1.1 Module Aims and Objectives

The module sets out to enable learners to set up the hardware and software of a music production suite to record, edit and mix. It provides a foundation in audio and music technology. It also provides the requisite understanding of MIDI to facilitate a live performance.

### 6.1.2 Minimum Intended Module Learning Outcomes

On successful completion of this module, the learner will be able to:

- MLO 1.1 Describe the role, function and interconnections of the hardware and software components within a computer music production suite.
- MLO 1.2 Apply the functionalities of MIDI - i.e. channel voice and controller messages.
- MLO 1.3 Record, edit and mix music and sound using a digital audio workstation.
- MLO 1.4 Create a composition comprised of midi sequenced synthesised and sampled material as well as live recorded sounds (audio / instruments).
- MLO 1.5 Use music technology creatively to present a live midi performance.

### 6.1.3 Rationale for inclusion of the module in the programme and its contribution to the overall IPLOs

Music Technology is a fundamental aspect of the audio industry. No matter what area of audio or music a practitioner works in, an understanding of music technology concepts and implementation issues are essential. The learning outcomes of this module relate and contribute particularly to the learner's attainment of Programme Learning Outcomes 3, 5 and 8.

### 6.1.4 Information Provided to Learners about the Module

Learners enrolled on this module will receive a copy of the module descriptor and assignment briefs, including an outline of the criteria for assessment.

Previous examples of assignments are also presented to the class.

### 6.1.5 Module Content, Organisation and Structure

The module is organised to deliver theory through lectures (2 hours) and supervised tutorials (1 hour). During tutorials, each learner will have a workstation allowing the lecturer to work individually with learners to demonstrate and explain the material.

The 2-hour lectures each week will combine lecture delivery and discussion of the material.

Each lecturer has a time allocated for one-to-one meetings with learners as required. These are not mandatory sessions but available either where the lecturer wishes to discuss an element of the module with a learner or a learner requests a meeting to discuss a particular topic. These sessions focus on academic issues only.

## **Module Content**

### **The computer as a music production platform**

- Hardware and software requirements for professional recording platforms
- Correct setup procedures and an understanding of the basic components in a typical workstation
- Hardware connections, USB, fire-wire, audio and MIDI interfaces
- Installing applications and drivers
- Native vs. TDM processing
- Hardware buffer settings
- AMS, MMS

### **Introduction to the DAW**

- Exploring the interface
- Creating tracks, types of tracks (MIDI, Instrument, Audio, Aux)
- Types of editors, absolute vs. relative
- Time-bases
- Edit and mixer windows

### **Recording on a DAW**

- Audio and MIDI recording
- Latency, monitoring
- Metronome
- File hierarchy
- Loop recording
- Using playlists
- Introduction to virtual instruments
- Synthesizers, drum machines and samplers

### **MIDI Messages**

- Control Voltage
- The MIDI Standard
- Channels, channel voice messages
- Continuous controller messages
- System messages, MTC
- The application of MIDI in live performance
- Real – time control of instruments
- Lighting and effects
- Rewire applications
- Planning and building MIDI mixers
- MIDI control of video
- Dedicated applications for live performance (Ableton, Mainstage)

### **Sampling**

- Recording and importing samples
- Editing samples
- Key groups, velocity zones
- Crossfading, original pitch
- Key follow
- Methods of triggering playback
- Modulation matrix
- Assigning multiple outputs

### **Digital Audio**

- A/D, D/A conversion
- Sampling frequency
- Bit depth and dynamic range
- Sample rate conversion, dither

### **Synthesis**

- VCO, VCA, VCF,
- Low frequency oscillators
- Low pass, band pass and high pass filters
- Resonance
- Types of synthesis

### **The DAW in a professional Studio**

- Cross-platform compatibility
- Technical planning and considerations of the modern-day project
- Strategies to ensure optimum audio quality and consistency when using more than one platform

### **The Virtual Patch-bay**

- I/O setups for professional systems
- Multichannel configurations
- Customizing digital and analogue I/O

### **6.1.6 Module Teaching and Learning Strategy**

This module is delivered using a combination of lectures and tutorials. An important part of music technology is understanding the parameters and controls within software and how to manipulate these within editors. These tutorials will focus on the connectivity between hardware and software and allow time for development of techniques.



Activity	Teaching / Learning Strategy	Learning Environment
<b>Lectures (48 hours)</b>	Lectures / participative discussions / problem solving exercises / practical demonstrations to link theory and practice / flipped classroom discussion and engagement	College
<b>Tutorial (24 hours)</b>	Learning / practical demonstration of music technology hardware and software connections / music technology techniques and recording software training	College / Mac labs
<b>Assignment (96 hours)</b>	Practice learning and perfecting music technology skills	College
<b>Independent Work (82 hours)</b>	Directed and self-directed learning / home study / practice use of DAW skills	College / Home

### 6.1.7 Timetabling, Learner Effort and Credit

The module is timetabled using one 3-hour session per week to the whole class. This will consist of a 2-hour lecture and a 1-hour tutorial with Music Tech workstations. On the workstations, the learners engage directly with hardware and software used within Music Technology.

The number of credits assigned to this module is our assessment of the learner effort required. It is our view that 10 ECTS of learner effort is required by learners coming new to the material to achieve the learning outcomes.

### 6.1.8 Work-Based Learning and Practice Placement.

There is no work based learning or practical placement in the module.

### 6.1.9 E-Learning

The College VLE is used to disseminate notes, advice and online resources to support the learners. The learners are also given access to Lynda.com as a resource for reference.

### 6.1.10 Module Physical Resource Requirements

Requirements are for a fully equipped lecture hall and access for learners to a computer workstation with music tech software. Access to hardware such as MIDI keyboards is also required.

### 6.1.11 Reading Lists and other information resources.

#### Recommended Reading

- Hosken, D. (2014) *An introduction to music technology*. New York: Routledge.  
Rumsey, F. (2004) *Desktop audio technology: digital audio and MIDI principles*. Oxford: Focal.  
Russ, M. (2009) *Sound synthesis and sampling*. Oxford: Focal Press.  
White, P. (2002) *Sound synthesis and sampling techniques*, London: SMT.

### Secondary Reading

Cole, B. (1996) *The composer's handbook*, London: Schott Educational.

Collins, N. (2009) *Handmade electronic music: the art of hardware hacking*. New York: Routledge.

Emmerson, S., (2007) *Living electronic music*. Aldershot; Burlington: Ashgate.

Holmes, T. (2015) *Electronic and experimental music: technology, music, and culture*. New York: Routledge.

Izhaki, R. (2011) *Mixing audio: concepts, practices and tools*. Oxford; Focal Press.

Rhind-Tutt, M. (2010) *Music technology from scratch*. London: Rhinegold Education.

Learners will be directed to appropriate journal literature and online material such as:

*Computer Music Journal, Electronic Musician, Future Music, Sound on Sound, The Mix, The Wire, Create Digital Music, emusician.*

### 6.1.12 Specifications for Module Staffing Requirements

For each instance of the module, there will be one lecturer qualified to at least Bachelor of Arts (Honours) level in Music Technology or equivalent and with a relevant third level teaching qualification (e.g. Certificate in Training and Education). Depending on numbers, a lab assistant may be required. Where this is the case the assistant will be required to have a sound understanding of music technology and computer based workstations, either through industry experience or academic qualification. For example, a final year Bachelor of Music Production (Honours) learner may be suitable to assist the lecturer in lab sessions. Any lab assistant will work under the supervision of the lecturer.

### 6.1.13 Module Summative Assessment Strategy

Name	Description	Weighting	Learning Outcomes
Project 1 - Composition	3-4-minute composition utilising both audio and MIDI elements. Supporting documentation will be submitted detailing technical processes and critical reflection on working processes and an evaluation of the artefact.	50%	2, 3, 4
Project 2 (Practical) – Presentation and performance	Live MIDI performance and presentation on real-time hardware control of virtual instruments in a musical performance. Supporting documentation will be submitted detailing technical processes and critical reflection on working processes and an evaluation of the artefact.	50%	1, 2, 5

### 6.1.14 Sample Assessment Materials

#### Sample Assignment:

#### Composition on a Digital Audio Workstation

Using both MIDI and audio elements, you will compose and produce a 3 to 4-minute musical piece. You may use pre-recorded audio, but the production must include at least one track of original recorded audio. The MIDI elements must include at least two examples of the use of controller messages.

Your composition must involve the use of the following:

- Virtual synthesizer
- Software sampler
- Drum loops
- Drum machine

The final piece must be mastered to WAV format, 16-bit, 44.1 KHz.

**All project files from the DAW must also be submitted.**

## 6.2 Module 2: Applications Technology

<b>Module Title</b>	Applications Technology
<b>Module NFQ Level (only if an NFQ level can be demonstrated)</b>	6
<b>Module number/Reference</b>	BAAMT102
<b>Parent Programme</b>	BA (Hons) in Audio and Music Technology
<b>Stage of Parent Programme</b>	1
<b>Semester</b>	1 and 2
<b>Module Credit Units (FET/HET/ECTS)</b>	ECTS
<b>Module Credit number of Units</b>	10
<b>List the teaching and learning modes</b>	FT
<b>Entry requirements (statement of knowledge, skill and competence)</b>	Learner has earned level 5 qualification. No previous applications technology ability is required.
<b>Pre-requisite module titles</b>	None
<b>Co-requisite module titles</b>	None
<b>Is this a capstone module? (Yes or No)</b>	No
<b>Staff qualifications (academic, pedagogical and professional/occupational) and experience required. (staff includes workplace personnel who are responsible for learners such as apprentices, trainees and learners in clinical placements)</b>	Staff are required to have at least a Bachelor of Arts (Honours) qualification in Music Technology or related discipline. Industry experience would be a benefit but is not a requirement. Staff are expected to have the Certificate in Training and Education qualification from Griffith College or its equivalent.
<b>Staff/learner ratio per centre (or instance of the module)</b>	For lecture load, ratio of 1:50 lecturer to learner is required and in lab sessions the maximum allowed is 1:25. The lecturer will also have 1 hour per week set aside in their timetable for 1:1 contact with learners who require it or have particular items they want to discuss.
<b>Maximum number of learners per centre (or instance of the module)</b>	50
<b>Duration of the Module</b>	Two Academic Semesters, 24 weeks teaching.
<b>Average (over the duration of the module) of the contact hours per week.</b>	3
<b>Physical resources and support required per centre (or instance of the module)</b>	One lecture hall with capacity at least 50 and one Computer lab with capacity of 25.

Analysis of Required Learning Effort										
Effort while in contact with staff										
Classroom and Demonstrations		Mentoring and small group tutoring		Other (Specify)		Directed e-learning (hours)	Independent learning (hours)	Other hours (specify)	Work-based learning hours of learning effort	Total Effort (hours)
Hours	Minimum ratio teacher/learner	Hours	Minimum ratio teacher/learner	Hours	Minimum ratio teacher/learner					
48	1:50	24	1:25				178			250
Allocation of marks (within the module)										
					Continuous Assessment	Supervised Project	Proctored practical	Proctored Written Examination	Total	
Percentage contribution					100%				100%	

### 6.2.1 Module Aims and Objectives

The objectives of the module are to enable the learner to use industry standard DAW software to record and edit audio and MIDI, managing sessions from conception to final mix-down using appropriate effects, automation, corrective techniques and professional workflow.

### **6.2.2 Minimum Intended Module Learning Outcomes**

On successful completion of this module, the learner will be able to:

- MLO 2.1 Use industry standard software to record and edit audio and MIDI.
- MLO 2.2 Work with audio dynamic and time-based effects.
- MLO 2.3 Mix and automate on a digital audio workstation.
- MLO 2.4 Competently manipulate pitch and time.
- MLO 2.5 Employ successful workflow techniques.

### **6.2.3 Rationale for inclusion of the module in the programme and its contribution to the overall IPLOs.**

Computer based applications have become industry standard throughout the entire audio industry. Whether it's in a recording studio, a TV/Radio station, out on location or working from home, an understanding of industry standard applications is essential for any producer/engineer. The learning outcomes of this module contribute to the learners' attainment of Programme Learning Outcomes 3, 1 and 8.

### **6.2.4 Information Provided to learners about the Module.**

Learners enrolled on this module will receive a copy of the module descriptor and assessment briefs.

### **6.2.5 Module Content, Organisation and Structure**

The module is organised to deliver theory through lectures and supervised tutorials. During tutorials, each learner will have a workstation allowing the lecturer to work individually with learners to demonstrate and explain the material.

The lectures each week will combine lecture delivery and discussion on the material.

Each lecturer has a time allocated for one-to-one meetings with learners as required. These are not mandatory sessions but available either where the lecturer wishes to discuss an element of the module with a learner or a learner requests a meeting to discuss a particular topic. These sessions focus on academic issues only.

## Module Content

### Pro Tools 101:

- Inside Pro Tools
- Creating a session
- Audio recording
- Importing media into your session
- MIDI recording
- Selecting and navigating
- Editing techniques
- Mixing techniques
- Finishing work

### Pro Tools 110:

- Interfacing with external hardware
- Enhancing software and managing data
- Recording MIDI & audio
- Working with time bases, elastic audio, and virtual instruments
- Editing and time-adjusting MIDI and audio
- Editing audio
- Automation
- Mixing

### Logic Pro 101:

- Introducing Logic
- Recording audio
- Editing audio
- Recording MIDI
- Programming and editing MIDI
- Programming drums
- Manipulating tempo and time stretching
- Mixing

## 6.2.6 Module Teaching and Learning Strategy

Classes are used to explain the concepts and exemplify (in workshop style) a series of exercises. Developing a learner's ability in DAWs requires constant reinforcement and so sample recordings are worked through both as tutorials and by the learner outside of direct contact hours.

Activity	Teaching / Learning Strategy	Learning Environment
<b>Lectures (48 hours)</b>	Lectures / participative discussions / problem solving exercises / demonstrations of use of the DAW	College
<b>Practical (24 hours)</b>	Learning / practicing application of DAW skills / training in use of DAW with latest versions of Pro Tools and Logic Pro / use of audio interfaces and MIDI controller keyboards	College / Mac lab
<b>Independent Work (178 hours)</b>	Directed and self-directed learning / home study / practice use of DAW skills	College / Home
<b>Examination (3 hours)</b>	In-class assessment of knowledge and related skills	College

### 6.2.7 Timetabling, Learner Effort and Credit

The module is timetabled as one 3-hour session to the whole class. This will consist of the 2-hour lecture and a 1-hour tutorial with Digital Audio Workstations. On the workstations, the learners engage directly with software used within Professional Audio environments.

The number of credits assigned to this module is our assessment of the learner effort required. It is our view that 10 ECTS of learner effort is required by learners coming new to the material to achieve the learning outcomes required.

### 6.2.8 Work-Based Learning and Practice Placement.

There is no work based learning or practical placement in the module.

### 6.2.9 E-Learning

The College VLE is used to disseminate notes, advice and online resources to support the learners. The learners are also given access to Lynda.com as a resource for reference.

### 6.2.10 Module Physical Resource Requirements

Requirements are for a fully equipped lecture hall and access for learners to a computer workstation with industry standard software. Access to hardware such as MIDI keyboards and i-Loks is also required.

### 6.2.11 Reading Lists and other information resources.

Cook, F. (2013) *Pro Tools 101 Official Courseware*, Boston MA: Delmar Cengage Learning.  
 CTCL (2013) *Pro Tools 110 Official Courseware*.  
 Nahmani, D. (2015) *Logic Pro X Professional Audio Production*. Berkley: Peachpit.  
 Hirsch, S. (2015) *Up and running with Pro Tools*. Lynda.com.  
 Lewin, S. (2016) *Pro Tools 12 Essential Training*. Lynda.com.  
 Mayfield, M. (2016) *Foundations of Digital Audio*. Lynda.com



### 6.2.12 Specifications for Module Staffing Requirements

For each instance of the module, there will be one lecturer qualified to at least Bachelor of Arts (Honours) level in Music Technology or equivalent and with a relevant third level teaching qualification (e.g. Certificate in Training and Education). Depending on numbers, a lab assistant may be required. Where this is the case the assistant will be required to have a sound understanding of digital audio workstations, either through industry experience or academic qualification. For example, a final year Bachelor of Music Production (Honours) learner may be suitable to assist the lecturer in lab sessions. Any lab assistant will work under the supervision of the lecturer.

### 6.2.13 Module Summative Assessment Strategy

The assessment is based on three In-Class Assessments consisting of multiple-choice tests of 1 hour in duration.

Name	Description	Weighting	Learning Outcomes
Logic 101	In class assessment on Logic fundamentals.	30%	1 - 5
Pro Tools 101	In class assessment on Pro Tools fundamentals.	30%	1 - 5
Pro Tools 110	In class assessment on core concepts and skills.	40%	1 - 5

These assessments focus on theory and practical application of the various software packages. Learners may choose to complete Pro Tools and Logic industry online exams at any time during their programme.

### 6.2.14 Sample Assessment Materials

#### Pro Tools 101 Sample Questions:

- Which of the following is TRUE about 'grouping'?
  - The 'All Group' can be deleted.
  - Deleting groups can be undone.
  - Groups cannot be renamed.
  - Groups can be modified to change their membership
  - All of the above are true.Answer: \_\_\_\_\_
- The number of processors used for the host-based (native) plug-in processing can be set in the \_\_\_\_\_ dialog box.
  - Options > Audio Suite
  - Playback Engine
  - Disk Allocation
  - I/O Setup
  - Preferences.Answer: \_\_\_\_\_

### 6.3 Module 3: Recording Studio Principles

<b>Module Title</b>	Recording Studio Principles
<b>Module NFQ Level (only if an NFQ level can be demonstrated)</b>	6
<b>Module number/Reference</b>	BAAMT103
<b>Parent Programme</b>	BA (Hons) in Audio and Music Technology
<b>Stage of Parent Programme</b>	1
<b>Semester</b>	1 and 2
<b>Module Credit Units (FET/HET/ECTS)</b>	ECTS
<b>Module Credit number of Units</b>	10
<b>List the teaching and learning modes</b>	FT
<b>Entry requirements (statement of knowledge, skill and competence)</b>	Learner has earned Level 5 qualification. No previous applications technology ability is required.
<b>Pre-requisite module titles</b>	None
<b>Co-requisite module titles</b>	None
<b>Is this a capstone module? (Yes or No)</b>	No
<b>Staff qualifications (academic, pedagogical and professional/occupational) and experience required. (staff includes workplace personnel who are responsible for learners such as apprentices, trainees and learners in clinical placements)</b>	Staff are required to have at least a Bachelor of Arts (Honours) qualification in Music Technology or related discipline. Industry experience would be a benefit but is not a requirement. Staff are expected to have the Certificate in Training and Education qualification from Griffith College or its equivalent.
<b>Staff/learner ratio per centre (or instance of the module)</b>	For lecture load, ratio of 1:50 lecturer to learner is required and in lab sessions the maximum allowed is 1:25. The lecturer will also have 1 hour per week set aside in their timetable for 1:1 contact with learners who require it or have particular items they want to discuss.
<b>Maximum number of learners per centre (or instance of the module)</b>	50
<b>Duration of the Module</b>	Two Academic Semesters, 24 weeks teaching
<b>Average (over the duration of the module) of the contact hours per week.</b>	3
<b>Physical resources and support required per centre (or instance of the module)</b>	One lecture hall with capacity at least 50 and one computer lab with capacity of 25.

Analysis of Required Learning Effort									
Effort while in contact with staff									
Classroom and Demonstrations	Mentoring and small group tutoring		Other (Specify)		Directed e-learning (hours)	Independent learning (hours)	Other hours (specify)	Work-based learning hours of learning effort	Total Effort (hours)
	Minimum ratio teacher/learner	Hours	Minimum ratio teacher/learner	Hours					
48	1:50	24	1:25			178			250
Allocation of marks (within the module)									
					Continuous Assessment	Supervised Project(s)	Proctored practical	Proctored Written Examination	Total
Percentage contribution						100%			100%

### 6.3.1 Module Aims and Objectives

The objective of the module is to introduce the learner to the operating principles of modern recording studios. The module provides detailed insights into audio processing and the operation and signal flow of analogue mixing consoles. Learners will complete a number of recordings to understand the principles of capturing sound.

### 6.3.2 Minimum Intended Module Learning Outcomes

On successful completion of this module the learner will be able to:

- MLO 3.1 Recognise and identify the properties of sound, microphones, signal flow and speaker systems.
- MLO 3.2 Correctly operate recording technologies, applying a range of audio and midi multi-track processes and techniques in the recording studio.
- MLO 3.3 Apply the essential skills required for the mix down process and complete a number of multi-track recordings.
- MLO 3.4 Develop workflow strategies for various recording projects.
- MLO 3.5 Display proper care and maintenance of equipment, adhering to health and safety requirements.
- MLO 3.6 Research key practitioner(s) in the field of professional audio/music

### 6.3.3 Rationale for inclusion of the module in the programme and its contribution to the overall IPLOs

This module focusses on the fundamental skills required by the learner in order to be a recording professional. Recording audio is the basis for this and the module introduces the fundamental recording techniques needed. These assist in the attainment of programme learning outcomes 6 and 8 while also contributing to programme learning outcomes 1, 3 and 4.

### 6.3.4 Information Provided to Learners about the Module

Learners enrolled on this module will receive a copy of the module descriptor and assignment briefs, including an outline of the criteria for assessment.

Previous examples of assignments are also presented to the class.

### 6.3.5 Module Content, Organisation and Structure

The module is organised to deliver theory through lectures (2 Hours) and supervised tutorials (1 Hour). During tutorials, each learner will have a workstation allowing the lecturer to work individually with learners to demonstrate and explain the material. Some tutorials will also take place in a studio environment to demonstrate techniques.

The 2-hour lectures each week will combine lecture delivery and discussion on the material.

Each lecturer has a time allocated for one-to-one meetings with learners as required. These are not mandatory sessions but available either where the lecturer wishes to discuss an element of the module with a learner, or a learner requests a meeting to discuss a particular topic. These sessions focus on academic issues only.

## Module Content

### Sound and Recording

- Basic properties of sound: The sound wave, wavelength, amplitude, frequency response, phase.
- Microphones: Types, design and characteristics, polar response, frequency response, multi mic recording.
- Signal flow: Pre-amplifiers, introduction to the circuit diagram, components.
- Speakers and amplifiers: Types, design & characteristics, components, crossovers, filters, distortion.
- Basic recording techniques: Drums, bass, guitar, vocals, piano and various solo and stringed instruments. recording electronic instruments through a D.I. box.

### Audio processing

- Tonal and dynamic: Compression, eq., gates, expanders.
- Spatial effects: Reverberation, echo and delay.
- Time based effects: Chorus, flanging, phasing, ADT and thickeners.
- Corrective: Pitch, rhythm.

### Mixing Consoles

- An introduction to the studio analogue mixing console: Channel section, monitor section, inserts, pre and post fader aux sends, master section, cue section, groups, multitrack sends, multitrack returns, mute, solo, solo in place
- The patch bay: Types, design, layout, normalling, half normalling, parallels
- An introduction to stereo Mix-down: Preparation, techniques for creating height, width, depth. Masking, creating “sonic boxes”, texture and atmosphere. Recording to two – track master.
- Mastering: Limiting, equalization, spatial enhancement, noise reduction, industry standard file types for various media.

### 6.3.6 Module Teaching and Learning Strategy

Learners are taught using a combination of lectures and practical tutorials.

Tutorials are recording studio based and are used to develop the learner’s proficiency in recording techniques and processing. In addition to this, learners also work on recording projects in a creative, collaborative fashion.

Activity	Teaching / Learning Strategy	Learning Environment
<b>Lectures (48 hours)</b>	Lectures / participative discussions / problem solving exercises / demonstrations of recording equipment and studio management / flipped classroom discussion and engagement	College
<b>Tutorial (24 hours)</b>	Studio-based learning / practical demonstrations of recording different instruments / training in use of recording equipment and mixing consoles	College / Studio / Mac lab
<b>Assignment (96 hours)</b>	Practice learning and perfecting recording studio skills	College
<b>Independent Work (82 hours)</b>	Directed and self-directed study / use of college studios to practice skills	College / Home

### 6.3.7 Timetabling, Learner Effort and Credit

The module is timetabled as one 3-hour session to the whole class. This will consist of the 2-hour lecture, and a 1-hour studio tutorial. In recording studios, the learners engage directly with hardware and software used within professional audio environments.

The number of credits assigned to this module is our assessment of the learner effort required. It is our view that 10 ECTS of learner effort is required by learners coming new to the material to achieve the learning outcomes required.

### 6.3.8 Work-based Learning and Practice-placement

There is no work based learning or practical placement involved in the module.

### 6.3.9 E-Learning

The College VLE is used to disseminate notes, advice and online resources to support the learners. The learners are also given access to Lynda.com as a resource for reference.

### 6.3.10 Module Physical Resource Requirements

Requirements are for a fully equipped lecture hall and access to one or more recording studios. In the recording studios, there should be an analog mixing console with patch bay.

### 6.3.11 Reading Lists and Other Learning Materials

#### Recommended reading

Ballou, G. (2015) *Handbook for sound engineers*, Oxford: Focal.

Blessner, B. & Salter, L.R. (2009) *Spaces speak, are you listening?: experiencing aural architecture*, Cambridge Mass.: MIT Press.

Huber, D. (2013) *Modern recording techniques*. Oxford: Focal Press.

### Secondary reading

- Owsinski, B. (2012) *Audio Recording Techniques*. Lynda.com
- Lee White, B (2014) *Foundations of Audio Compression and Dynamic Processing* Lynda.com
- Lee White, B (2014) *Foundations of Audio: EQ and Filters* Lynda.com
- Brice, R. (1998) *Music engineering: the electronics of playing and recording*. Oxford: Newnes.
- Gibson, D. (2005) *The art of mixing: a visual guide to recording, engineering, and production*. Boston, MA: Thomson Course Technology.
- Pohlmann, K. (2011) *Principles of digital audio*. New York: McGraw-Hill.
- Rayburn, R. (2011) *Eargle's the microphone book: From mono to stereo to surround - a guide to microphone design and application*. Oxford: Focal Press
- Watkinson, J. (2002) *An introduction to digital audio*. Oxford: Focal Press.
- White, P. (2002) *Recording and production techniques*. London: SMT.

### 6.3.12 Specifications of Module Staffing Requirements

For each instance of the module, there will be one lecturer qualified to at least Bachelor of Arts (Honours) level in Sound Engineering or equivalent, and with a relevant third level teaching qualification (e.g. Certificate in Training and Education). Depending on numbers a lab assistant may be required. Where this is the case the Assistant will be required to have a sound understanding of music technology and computer based workstations, either through industry experience or academic qualification. For example, a final year Bachelor of Music Production (Honours) learner may be suitable to assist the lecturer in lab sessions. Any lab assistant will work under the supervision of the lecturer.

### 6.3.13 Module Assessment Strategy

Name	Description	Weighting	Learning Outcomes
Project 1: Stereo Recording	Learners will be asked to make an ensemble recording using a minimum of three stereo recording techniques. This will give the learner an opportunity to implement recording skills they learn in early lectures and tutorials. Supporting documentation will be submitted detailing technical processes and critical reflection on working processes and an evaluation of the artefact.	30%	3.1 – 3.5
Project 2: Multi-track recording	Learners will complete one multi-track recording. To do this, learners will plan and realise a multi-instrument recording. This recording will then require appropriate editing and mixing skills. Supporting documentation will be submitted detailing technical processes and critical reflection on working processes and an evaluation of the artefact.	60%	3.1 – 3.5
Written Report	Learners are required to research and write a report on a key practitioner from the world of Engineering/Production. The report should be 2000 – 3000 words in length	10%	3.6

### 6.3.14 Sample Assessment Materials

#### Sample Project 1 – Stereo Recording

Working in tutor assigned groups, you will engineer and record an ensemble comprised of artists that will not include yourself or other members of your assignment group. There must be at least two sound sources recorded simultaneously live in the same room. The microphone captured sound, the ensemble you record and the duration of the piece will be decided by negotiation with your tutor. A detailed plan showing the position of the instruments, as well as the type and placements of the microphones employed must be submitted with your work.

The session must be recorded at **48KHz, 24 – bit resolution**.

#### Submit:

- **DAW session file**
- **Stereo audio files of recording, with correct labelling of stereo techniques employed. (X-Y, MS, ORTF, etc.)**
- **Supporting documentation**

#### Sample Project 2 – Multi-track Recording

Working in tutor assigned groups, you will engineer and record a multi-track session consisting of multiple instruments. There must be at least 8 tracks of recorded audio. The piece will be decided by negotiation with your tutor. A detailed plan showing the position of the instruments, as well as the type and placements of the microphones employed must be submitted with your work.

Once recorded, a stereo monitor mix of the file should be kept for reference. Each participant should then submit their own mixes of the piece. Supporting documentation showing the position of the instruments, as well as the type and placements of the microphones employed must be submitted with your work. Details on any edit/mix decisions should also be included in this.

The session must be recorded at **48KHz, 24 – bit resolution**.

#### Submit:

- **DAW session file**
- **One stereo Monitor mix of piece**
- **One finished Mix of piece**
- **Supporting documentation**

#### Sample Project 3 – Research Report

You will carry out research and write a report on any key recording practitioner or technique (to be negotiated with your tutor) in the field of professional audio. The report must be 2000 words in length and employ Harvard referencing format.

#### Submit:

- **1 x Microsoft Word Document (2000 words)**



## 6.4 Module 4: Music for Producers 1

<b>Module Title</b>	Music for Producers 1
<b>Module NFQ Level (only if an NFQ level can be demonstrated)</b>	6
<b>Module number/Reference</b>	BAAMT104
<b>Parent Programme</b>	BA (Hons) in Audio and Music Technology
<b>Stage of Parent Programme</b>	1
<b>Semester</b>	1 and 2
<b>Module Credit Units (FET/HET/ECTS)</b>	ECTS
<b>Module Credit number of Units</b>	10
<b>List the teaching and learning modes</b>	FT
<b>Entry requirements (statement of knowledge, skill and competence)</b>	Learner has earned Level 5 qualification. No previous applications technology ability is required.
<b>Pre-requisite module titles</b>	None
<b>Co-requisite module titles</b>	None
<b>Is this a capstone module? (Yes or No)</b>	No
<b>Staff qualifications (academic, pedagogical and professional/occupational) and experience required. (staff includes workplace personnel who are responsible for learners such as apprentices, trainees and learners in clinical placements)</b>	Staff are required to have at least a Bachelor of Arts (Honours) qualification in Music Technology or related discipline. Industry experience would be a benefit but is not a requirement. Staff are expected to have the Certificate in Training and Education qualification from Griffith College or its equivalent.
<b>Staff/learner ratio per centre (or instance of the module)</b>	For lecture load, ratio of 1:50 lecturer to learner is required and in lab sessions the maximum allowed is 1:25 The lecturer will also have 1 hour per week set aside in their timetable for 1:1 contact with learners who require it or have particular items they want to discuss.
<b>Maximum number of learners per centre (or instance of the module)</b>	50
<b>Duration of the Module</b>	Two Academic Semester, 24 weeks teaching
<b>Average (over the duration of the module) of the contact hours per week.</b>	3
<b>Physical resources and support required per centre (or instance of the module)</b>	One lecture hall with capacity at least 50 and one computer lab with capacity of 25.

Analysis of Required Learning Effort										
Effort while in contact with staff										
Classroom and Demonstrations		Mentoring and small group tutoring		Other (Specify)		Directed e-learning (hours)	Independent learning (hours)	Other hours (specify)	Work-based learning hours of learning effort	Total Effort (hours)
Hours	Minimum ratio teacher/learner	Hours	Minimum ratio teacher/learner	Hours	Minimum ratio teacher/learner					
48	1:50	24	1:25				178			250
Allocation of marks (within the module)										
					Continuous Assessment	Supervised Project(s)	Proctored practical	Proctored Written Examination	Total	
Percentage contribution						60%		40%	100%	

### 6.4.1 Module Aims and Objectives

This module aims to introduce learners to musical theory and aural training skills. Learners are required to analyse musical forms in a variety of pieces of music in popular and contemporary music genres. It further aims to enable the learner to apply these notational and theoretical skills through technology utilising the variety of functions available from graphic to standard notation. Learners are equipped with the vocabulary to convey musical ideas to instrumentalists.

### 6.4.2 Minimum Intended Module Learning Outcomes

On successful completion of this module the learner will be able to:

- MLO 4.1 Utilise standard musical theory and notation to convey musical ideas, forms and genres.
- MLO 4.2 Transcribe musical passages through analysis of recordings or by other aural means using standard notation.
- MLO 4.3 Explain specific techniques in orchestration, musical arrangement and also technical details and practicalities of standard instruments.
- MLO 4.4 Present and explain structural and harmonic concepts both graphically and verbally to peers and musicians.
- MLO 4.5 Compose skilfully using music technology.

### 6.4.3 Rationale for inclusion of the module in the programme and its contribution to the overall IPLOs

Music production, Music Technology and Audio Engineering are no longer exclusive to the recording studio. As a result, the skills required to be a successful modern day audio professional have changed. A traditional more technically skilled 'Engineer' needs musical skills. This module focuses on the music theory and aural training skillset required for today's audio professionals. The module addresses Programme Learning Outcomes 1 and 2 while also underpinning knowledge and skills for Outcomes 4 and 5.

### 6.4.4 Information Provided to Learners about the Module

Learners enrolled on this module will receive a copy of the module descriptor and assignment briefs, including an outline of the criteria for assessment.

Previous examples of assignments are also presented to the class.

### 6.4.5 Module Content, Organisation, and Structure

The module is organised to deliver theory through lectures and supervised tutorials. During tutorials, each learner will have a workstation allowing the lecturer to work individually with learners to demonstrate and explain the material.

The lectures each week will combine lecture delivery and discussion on the material.

Each lecturer has a time allocated for one-to-one meetings with learners as required. These are not mandatory sessions but available either where the lecturer wishes to discuss an element of the module with a learner, or a learner requests a meeting to discuss a particular topic. These sessions focus on academic issues only.

## **Module Content**

### **Music analysis**

- Harmonic and melodic languages, standard and contemporary
- Analysis of rhythm and tempo
- Stylistics
- Instrumentation
- Modulation
- Dynamics

### **Music theory**

- Standard musical notation: note-heads, clefs, repeat bars etc.
- Triads and inversions
- The cycle of fifths: II-V-I harmonic progressions
- Time signatures and key signatures
- Modes
- Aural training and dictation
- Intervals

### **Arrangement and orchestration**

- Sections of the orchestra: woodwind, brass, percussion, strings
- Instrument demonstrations by visiting instrumentalists
- Jazz, classical and popular stylistics
- Film score orchestration

### **Software Programming**

- The parameters of MIDI programming
- Gridlines, quantifying, note on/ off, velocity etc.
- Instrumental plug-ins
- Samplers as acoustic instruments
- Managing Instrumental groups
- Transposing

### **6.4.6 Module Teaching and Learning Strategy**

The module is delivered through a combination of lectures and tutorials. Lectures will bring Tutorials will enable learners to practice analysis of harmonic and melodic languages, music theory/standard notation, time signatures and key signatures. An emphasis will be put on aural training to equip the learner for working in a recording environment.

Activity	Teaching / Learning Strategy	Learning Environment
<b>Lectures (48 hours)</b>	Lectures / participative discussions / demonstration of musical structures and forms using notation and representation / analysis of musical structures	College
<b>Tutorial (24 hours)</b>	In-depth focus on music theory elements / music theory exercises and demonstrations using audio material / practicing skills	College / Mac lab
<b>Assignment (96 hours)</b>	Practice learning and perfecting music theory skills required for producers	College
<b>Independent Work (82 hours)</b>	Directed and self-directed learning / home study / access to online resources	College / Home
<b>Examination (2 hours)</b>	Evaluation of knowledge and related skills	College

#### 6.4.7 Timetabling, Learner Effort and Credit

The module is timetabled as one 3-hour session to the whole class. This will consist of the 2-hour lecture, and a 1-hour lab tutorial. In the labs, the learners engage directly with music notation and editing software, while also being able to listen to material required for aural training.

The number of credits assigned to this module is our assessment of the learner effort required. It is our view that 10 ECTS of learner effort is required by learners coming new to the material to achieve the learning outcomes required.

#### 6.4.8 Work-based Learning and Practice-placement

There is no work based learning or practical placement involved in the module.

#### 6.4.9 E-Learning

The College VLE is used to disseminate notes, advice and online resources to support the learners. The learners are also given access to Lynda.com as a resource for reference.

#### 6.4.10 Module Physical Resource Requirements

Requirements are for a fully equipped lecture hall and access for each group to 3 hour sessions in a computer lab. Software required for this module is a standard score editor / sequencer and music playback device. The lecturers station should be equipped with a fully weighted MIDI keyboard.

### 6.4.11 Reading lists and other learning materials

#### Recommended reading

Delamont, G. (1990) *Modern harmonic technique: The elements of harmony: 001*. Delevan; New York: Kendor Music.

Rooksby, R. (2007) *Arranging songs: how to put the parts together*. New York NY: Backbeat Books.

Taylor, E. (1989) *The AB guide to music theory [2 Vol.s]*. London: Associated Board of the Royal Schools of Music.

Velard, J. (2015) *Music Theory for Songwriters: The Fundamentals* Lynda.com

Velard, J. (2015) *Music Theory for Songwriters: Harmony* Lynda.com

#### Secondary reading

Adler, S. (2002) *The study of orchestration.*, London: W. W. Norton & Company.

Cole, B. (1996) *The composer's handbook*. London: Schott Educational.

Cole, B. (2006) *The pop composer's handbook: a step by step guide to the composition of melody, harmony, rhythm and structure*. London: Schott.

Hewitt, M. (2009) *Composition for computer musicians*. Boston: Course Technology.

Rumsey, F. (2004) *Desktop audio technology: digital audio and MIDI principles*. Oxford: Focal

### 6.4.12 Specifications for Module Staffing Requirements

For each instance of the module, there will be one lecturer qualified to at least Bachelor of Arts (Honours) level in Music or equivalent, and with a relevant third level teaching qualification (e.g. Certificate in Training and Education). Depending on numbers a lab assistant may be required. Where this is the case the Assistant will be required to have a sound understanding of music theory, either through industry experience or academic qualification. For example, a final year Bachelor of Music Production (Honours) learner may be suitable to assist the lecturer in lab sessions. Any lab assistant will work under the supervision of the lecturer.

### 6.4.13 Module Summative Assessment Strategy

Name	Description	Weighting	Learning Outcomes
Assignment 1:	For this assignment, learners will take an in-class assessment on Music theory, examining their knowledge on Intervals, Scales, Rhythm, chords and melodic transposition.	30%	4.2 – 4.5
Assignment 2: Aural Assessment	An in-class assessment examine arrangement for piano. Using a DAW, learners will be required to compose a 16-bar piece of music in a style of their choosing. They will then be required to transcribe the piece as notation on a manuscript.	30%	4.2
Exam	During this 3-hour theory exam, learners are required to write and identify Scales and modes. Write and label chords. Add bar lines / add time signatures to identify rhythm. Write harmonic sequences and a short composition.	40%	4.1 – 4.4

#### 6.4.14 Sample Assessment Materials

##### Music for Producers 1 / December (in class) assignment

**Date: T.B.C.**

**Time: T.B.C.**

Music theory test

- Intervals: identify simple and compound and their inversions
- Scales, modes, pentatonic and whole note scales: write scales and modes in Treble, Bass, Alto or Tenor Clef
- Rhythm: add bar-lines / add time signatures to given rhythm extracts (Regular or Irregular time)
- Chords (Triads, root position and inversions): write chords in treble and Bass Clef
- Melodic Transpositions: rewrite melody extract in tenor or alto clef, key transposition

# Intervals

A handwritten musical staff in treble clef containing several intervals and accidentals. The notes are: G4 (with a sharp sign above), A4 (with a sharp sign below), B4 (with a sharp sign above), C5 (with a sharp sign above), D5 (with a sharp sign above), E5 (with a sharp sign above), F5 (with a sharp sign above), G5 (with a sharp sign above), A5 (with a sharp sign above), B5 (with a sharp sign above), C6 (with a sharp sign above), D6 (with a sharp sign above), E6 (with a sharp sign above), F6 (with a sharp sign above), G6 (with a sharp sign above), A6 (with a sharp sign above), B6 (with a sharp sign above), C7 (with a sharp sign above).

Recognise the interval and write its inversion (next 2 lines below)

A handwritten musical staff in treble clef containing several intervals and accidentals. The notes are: G4 (with a sharp sign above), A4 (with a sharp sign above), B4 (with a sharp sign above), C5 (with a sharp sign above), D5 (with a sharp sign above), E5 (with a sharp sign above), F5 (with a sharp sign above), G5 (with a sharp sign above), A5 (with a sharp sign above), B5 (with a sharp sign above), C6 (with a sharp sign above), D6 (with a sharp sign above), E6 (with a sharp sign above), F6 (with a sharp sign above), G6 (with a sharp sign above), A6 (with a sharp sign above), B6 (with a sharp sign above), C7 (with a sharp sign above).

A handwritten musical staff in treble clef containing several intervals and accidentals. The notes are: G4 (with a sharp sign above), A4 (with a sharp sign above), B4 (with a sharp sign above), C5 (with a sharp sign above), D5 (with a sharp sign above), E5 (with a sharp sign above), F5 (with a sharp sign above), G5 (with a sharp sign above), A5 (with a sharp sign above), B5 (with a sharp sign above), C6 (with a sharp sign above), D6 (with a sharp sign above), E6 (with a sharp sign above), F6 (with a sharp sign above), G6 (with a sharp sign above), A6 (with a sharp sign above), B6 (with a sharp sign above), C7 (with a sharp sign above).

A handwritten musical staff in treble clef containing several intervals and accidentals. The notes are: G4 (with a sharp sign above), A4 (with a sharp sign above), B4 (with a sharp sign above), C5 (with a sharp sign above), D5 (with a sharp sign above), E5 (with a sharp sign above), F5 (with a sharp sign above), G5 (with a sharp sign above), A5 (with a sharp sign above), B5 (with a sharp sign above), C6 (with a sharp sign above), D6 (with a sharp sign above), E6 (with a sharp sign above), F6 (with a sharp sign above), G6 (with a sharp sign above), A6 (with a sharp sign above), B6 (with a sharp sign above), C7 (with a sharp sign above).

# Scales

major Eb major

A handwritten musical staff in treble clef, divided into two sections by a vertical bar line. The first section is labeled 'major' and the second section is labeled 'Eb major'. The staff is currently empty of notes.

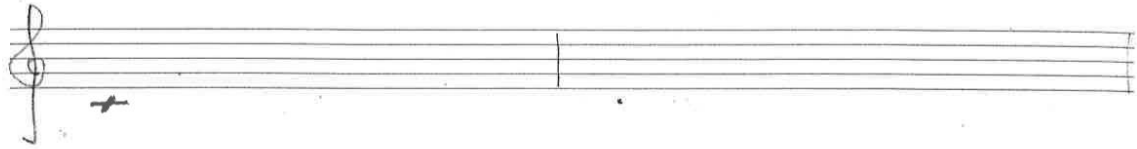


e melodic minor (↑↓)



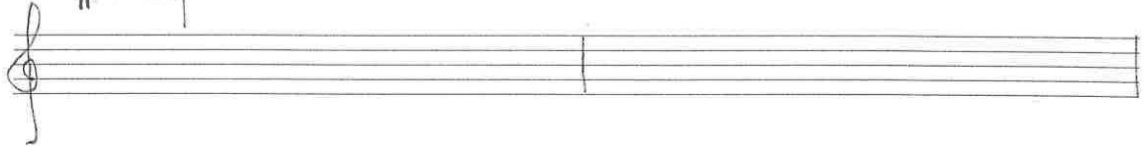
Whole note scale

A Major Pentatonic



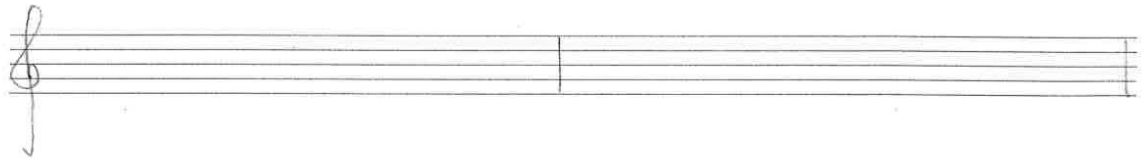
F# major

e harmonic minor



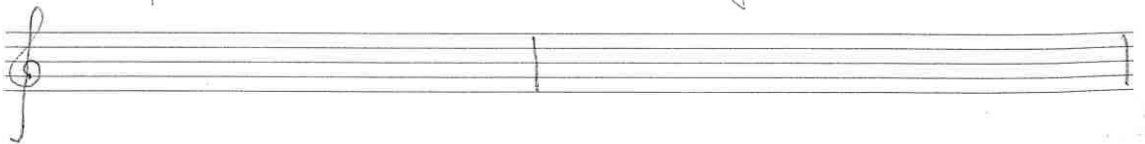
G Dorian

D Aeolian



B major

E Mixo-lydian



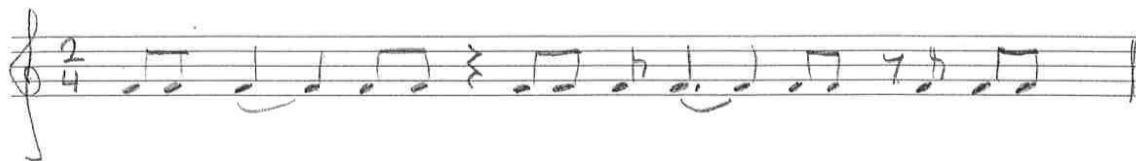
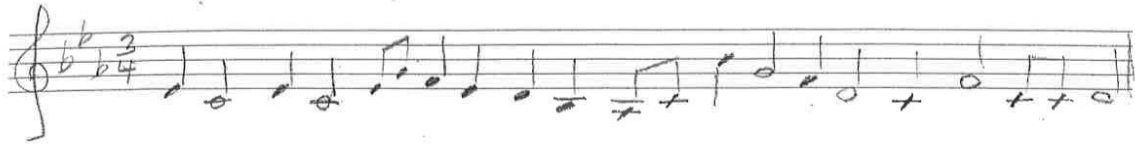
b minor Pentatonic

F Phrygian

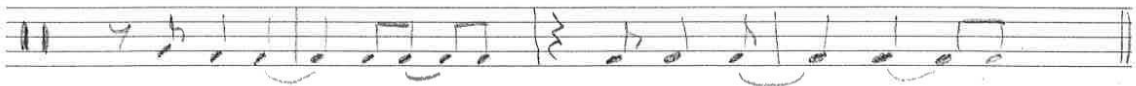
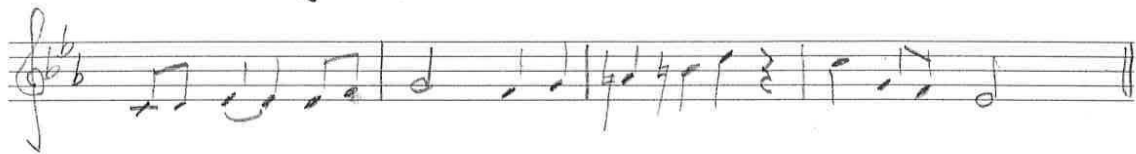


### 3. Rhythm

Add bar lines

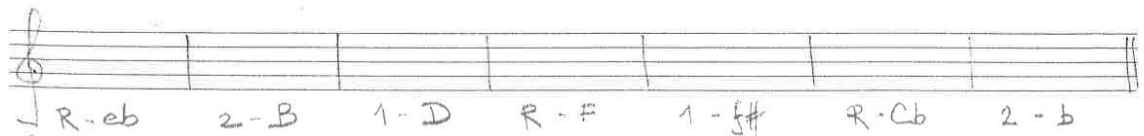


Add time signature



### 1. Chords

R - root    1 - first inversion    2 - second inversion



5. Transposition: Write this passage an octave lower in each clef.

*p dolce* etc

**113**

**7:**

**Assignment 2 brief:**

Music for Producers 1 / April (in class) assignment

Date: T.B.C.

Time: T.B.C.

**Task 1**

Using Logic, create a new session (with your name). Choose a song (pop, rock, folk, jazz, trad)

Write a 16-bar simplified version of you chosen song **for piano**.

Use the Grand Staff, Chord progression ending with the cadence: choose your key signature, choose your time signature, use the rests in melody

**Task 2**

Re-Write your version into music manuscript sheet.

Save the Logic file for submission. (mp3 track).

## 6.5 Module 5: Live Music and Performance Technology 1

<b>Module Title</b>	Live Music and Performance Technology 1
<b>Module NFQ Level (only if an NFQ level can be demonstrated)</b>	6
<b>Module number/Reference</b>	BAAMT105
<b>Parent Programme</b>	BA (Hons) in Audio and Music Technology
<b>Stage of Parent Programme</b>	1
<b>Semester</b>	2
<b>Module Credit Units (FET/HET/ECTS)</b>	ECTS
<b>Module Credit number of Units</b>	5
<b>List the teaching and learning modes</b>	FT
<b>Entry requirements (statement of knowledge, skill and competence)</b>	Learner has earned Level 5 qualification. No previous experience is required
<b>Pre-requisite module titles</b>	None
<b>Co-requisite module titles</b>	None
<b>Is this a capstone module? (Yes or No)</b>	No
<b>Staff qualifications (academic, pedagogical and professional/occupational) and experience required. (staff includes workplace personnel who are responsible for learners such as apprentices, trainees and learners in clinical placements)</b>	Staff are required to have at least a Bachelor of Arts (Honours) qualification in Music Technology or related discipline. Industry experience would be a benefit but is not a requirement. Staff are expected to have the Certificate in Training and Education qualification from Griffith College or its equivalent.
<b>Staff/learner ratio per centre (or instance of the module)</b>	For lecture load, ratio of 1:50 lecturer to learner is required and in lab sessions the maximum allowed is 1:25 The lecturer will also have 1 hour per week set aside in their timetable for 1:1 contact with learners who require it or have particular items they want to discuss.
<b>Maximum number of learners per centre (or instance of the module)</b>	50
<b>Duration of the Module</b>	One Academic Semester, 12 weeks teaching
<b>Average (over the duration of the module) of the contact hours per week.</b>	3
<b>Physical resources and support required per centre (or instance of the module)</b>	One lecture hall with capacity at least 50 and one computer lab with capacity of 25.

Analysis of Required Learning Effort										
Effort while in contact with staff										
Classroom and Demonstrations		Mentoring and small group tutoring		Other (Specify)		Directed e-learning (hours)	Independent learning (hours)	Other hours (specify)	Work-based learning hours of learning effort	Total Effort (hours)
Hours	Minimum ratio teacher/learner	Hours	Minimum ratio teacher/learner	Hours	Minimum ratio teacher/learner					
24	1:50	12	1:25				89			125
Allocation of marks (within the module)										
					Continuous Assessment	Supervised Project(s)	Proctored practical	Proctored Written Examination	Total	
Percentage contribution							80%	20%	100%	

### 6.5.1 Module Objectives

High-end modern productions rely on many cutting-edge audio and visual technologies working together in synchronization. This module introduces the learner to all the technical and electrical aspects of the standard technologies associated with live performances. This module not only covers sound and music production systems, but also basic electronics, health and safety, and the hardware and software systems for controlling lights and visual projections.

### 6.5.2 Minimum Intended Module Learning Outcomes

On successful completion of this module the learner will be able to:

- MLO 5.1 Correctly set up a small stage production incorporating elements of live instruments and triggered sound using performance software.
- MLO 5.2 Define the basics of audio electronics.
- MLO 5.3 Exhibit an understanding of music performance technologies.
- MLO 5.4 Safely operate sound, lighting, and other equipment associated with live performances.

### 6.5.3 Rationale for inclusion of the module in the programme and its contribution to the overall IPLOs

Performance technology is an emerging and growing industry. Using the skills and theory learned in Music Technology 1 and Music for Producers 1, this module will equip learners with the skills need to collaborate beyond the recording studio with clients. The learning outcomes of this module contribute to Programme Learning Outcomes 1 and 7 while also contributing to the attainment of Outcome 8.

### 6.5.4 Information Provided to Learners about the Module

Learners enrolled on this module will receive a copy of the module descriptor and assignment briefs, including an outline of the criteria for assessment.

Previous examples of assignments are also presented to the class.

### 6.5.5 Module Content, Organisation and Structure

The module is organised to deliver theory through lectures (2 hours) and supervised tutorials (1 hour). During tutorials, each learner will have a workstation allowing the lecturer to work individually with learners to demonstrate and explain the material. Some tutorials will take place in a larger room with P.A. and lighting equipment allowing learners to engage directly in a performance scenario.

The lectures each week will combine lecture delivery and discussion on the material.

Each lecturer has a time allocated for one-to-one meetings with learners as required. These are not mandatory sessions but available either where the lecturer wishes to discuss an element of the module with a learner, or a learner requests a meeting to discuss a particular topic. These sessions focus on academic issues only.

## Module Content

### Safe operation of live sound equipment

- An understanding of Health and Safety regulations associated with live performance technologies.

### Music performance technologies

- An example of integration between musical instruments and performance software.

### Audio electronics

- Knowledge of the basic theory of electronics: current, voltage, resistance and capacitance. An understanding of the basic concepts governing power supplies and transformers.

### Small stage production incorporating elements of live instruments and triggered sound using performance software

- Good stage layout.
- Good communications skills.
- Full consideration for technical requirements.

## 6.5.6 Module Teaching and Learning Strategy

This module is delivered through a combination of lectures, tutorials and practical sessions in a performance environment. The emphasis is on developing skills used to make the connection between music technology software and hardware used both for performance and external device control during a live show. These skills need to be applied in a systematic way, so learners will be encouraged to work in a performance setting as often as possible.

Activity	Teaching / Learning Strategy	Learning Environment
<b>Lectures (24 hours)</b>	Lectures / participative discussions / case studies / problem solving exercises / demonstrations of procedures for connecting audio and visual hardware and software / flipped classroom discussion and engagement	College
<b>Tutorial (12 hours)</b>	In-depth practical demonstrations of live sound equipment operation / use of college resources to practice skills / practice safe operation of all equipment	College / Studio
<b>Assignment (48 hours)</b>	Practice learning and perfecting live music performance technology skills	College / Studio
<b>Independent Work (41 hours)</b>	Directed and self-directed learning / home study / use of college live sound equipment	College / Home
<b>Examination (2 hours)</b>	Evaluation of health and safety knowledge and related skills	College



### 6.5.7 Timetabling, Learner Effort and Credit

The module is timetabled as one 3-hour session to the whole class. This will consist of the 2-hour lecture, and a 1-hour tutorial. In the labs, the learners engage directly with music technology and performance software, allowing development of the skills required to programme music/performance material.

The number of credits assigned to this module is our assessment of the amount of learner effort required. It is our view that 5 ECTS of learner effort is required by learners coming new to the material to achieve the learning outcomes required.

### 6.5.8 Work-based Learning and Practice-placement.

There is no work based learning or practical placement involved in the module.

### 6.5.9 E-Learning

The College VLE is used to disseminate notes, advice and online resources to support the learners. The learners are also given access to Lynda.com as a resource for reference.

### 6.5.10 Module Physical Resource Requirements

Requirements are for a fully equipped lecture hall and access for learners to 1.5 hour sessions in a computer lab. Software required for this module is music tech software. A standard DAW. Performance controllers will be required with a performance area for tutorials and student independent learning.

### 6.5.11 Reading lists and other Information Resources.

#### Recommended reading

- Amundson, M. (2007) *Live sound: theory and practice*. Las Vegas: Timeless Communications.
- Davis, D., Patronis, E. & Brown, P. (2013) *Sound system engineering*. Oxford: Focal Press.
- Van Beek, M (2004) *Electrical safety for live events*. Cambridge: Entertainment Technology Press.
- Mort, S. (2015) *Stage Lighting: An On-the-job Reference Tool with Online Video Resources*  
Bloomsbury Methuen Drama.
- Pilbrow, R. (2008) *Stage Lighting Design: The Art, the Craft, the life*. Nick Hern Books.
- Fraser, N. and Benninson, S. (2007) *The Handbook of Stage Lighting* The Crowood Press Ltd.
- Yeuda, B. (2016) *Making Music with Ableton Push* Lynda.com
- Velard, J. (2014) *Up and Running with MainStage 3* Lynda.com

### Secondary reading

Davis, G. & Jones, R. (1990) *Sound reinforcement handbook*, Milwaukee: Hal Leonard Corporation.  
Evans, B. (2011) *Live sound fundamentals*. Boston MA: Course Technology.  
Gibson, B. (2011) *The ultimate live sound operator's handbook*, Milwaukee WI: Hal Leonard Books.  
Huntington, J. (2013) *Control systems for live entertainment*, Oxford: Focal Press.  
Margulies, J. (2013) *Ableton Live 9 Power*. Boston; Delmar Cengage Learning.  
Coleman, P. (2003) *Basics – A beginners Guide to Stage lighting* Entertainment Technology Press Ltd.

### 6.5.12 Specifications for Module Staffing Requirements

For each instance of the module, there will be one lecturer qualified to at least Bachelor of Arts (Honours) level in Music Technology or equivalent and with a relevant third level teaching qualification (e.g. Certificate in Training and Education). Depending on numbers a lab assistant may be required. Where this is the case the assistant will be required to have a sound understanding of object oriented programming, either through industry experience or academic qualification. For example, a final year Bachelor of Music Production (Honours) learner may be suitable to assist the lecturer in lab sessions. Any lab assistant will work under the supervision of the lecturer.

### 6.5.13 Module Summative Assessment Strategy

The assessment is based on a written examination and a practical demonstration.  
For the practical demonstration,

Element No	Weighting	Type	Description	Learning Outcomes Assessed
1	20%	Examination	A written exam covering Health and Safety standards and practices.	5.1, 5.3
2	80%	Practical demonstration	Learners will be required to do a live performance of one of their own compositions, utilising hardware performance controllers. The performance should also incorporate a visual element.	5.2, 5.4

### 6.5.14 Sample Assessment Materials

#### Health and Safety exam: Sample Questions:

- 1 What is the general definition of a hazard?
- 2 What is the main function of a fire escape?
- 3 When picking up a heavy load, where should you bend from?
- 4 When discovering someone who has suffered an electric shock, what initial action should you take?
- 5 Why should you not attempt to extinguish a fire among electrical equipment with water?

## 6.6 Module 6: Computer Basics for Audio Visual Workstations

<b>Module Title</b>	Computer Basics for Audio Visual Workstations
<b>Module NFQ Level (only if an NFQ level can be demonstrated)</b>	6
<b>Module number/Reference</b>	BAAMT106
<b>Parent Programme</b>	BA (Hons) in Audio and Music Technology
<b>Stage of Parent Programme</b>	1
<b>Semester</b>	2
<b>Module Credit Units (FET/HET/ECTS)</b>	ECTS
<b>Module Credit number of Units</b>	5
<b>List the teaching and learning modes</b>	FT
<b>Entry requirements (statement of knowledge, skill and competence)</b>	Learner has earned Level 5 qualification. No previous experience is required
<b>Pre-requisite module titles</b>	None
<b>Co-requisite module titles</b>	None
<b>Is this a capstone module? (Yes or No)</b>	No
<b>Staff qualifications (academic, pedagogical and professional/occupational) and experience required. (staff includes workplace personnel who are responsible for learners such as apprentices, trainees and learners in clinical placements)</b>	Staff are required to have at least a Bachelor of Arts (Honours) qualification in Music Technology or related discipline. Industry experience would be a benefit but is not a requirement. Staff are expected to have the Certificate in Training and Education qualification from Griffith College or its equivalent.
<b>Staff/learner ratio per centre (or instance of the module)</b>	For lecture load, ratio of 1:50 lecturer to learner is required and in lab sessions the maximum allowed is 1:25 The lecturer will also have 1 hour per week set aside in their timetable for 1:1 contact with learners who require it or have particular items they want to discuss.
<b>Maximum number of learners per centre (or instance of the module)</b>	50
<b>Duration of the Module</b>	One Academic Semester, 12 weeks teaching
<b>Average (over the duration of the module) of the contact hours per week.</b>	3
<b>Physical resources and support required per centre (or instance of the module)</b>	One lecture hall with capacity at least 50 and one computer lab with capacity of 25.

Analysis of Required Learning Effort										
Effort while in contact with staff										
Classroom and Demonstrations	Mentoring and small group tutoring		Other (Specify)		Directed e-learning (hours)	Independent learning (hours)	Other hours (specify)	Work-based learning hours of learning effort	Total Effort (hours)	
	Hours	Minimum ratio teacher/learner	Hours	Minimum ratio teacher/learner						
24	1:50	12	1:25			89			125	
Allocation of marks (within the module)										
					Continuous Assessment	Supervised Project(s)	Proctored practical	Proctored Written Examination	Total	
Percentage contribution					100%				100%	

### 6.6.1 Module Aims and Objectives

A working knowledge of computer hardware, operating systems and network solutions is essential to the modern digital multimedia practitioner. This module aims to familiarise the learner with the architecture supporting today's modern applications while promoting the problem-solving skills necessary in the efficient use and maintenance of the computer workstation.

### 6.6.2 Minimum Intended Module Learning Outcomes

On successful completion of this module the learner will be able to:

- MLO 6.1 Describe digital concepts as they relate to foundational hardware and software constructs of the AV workstation.
- MLO 6.2 Identify and efficiently utilise hardware and software components necessary to workstation commissioning.
- MLO 6.3 Employ modern operating systems effectively to deploy software, manage, backup and integrate Cloud Services.
- MLO 6.4 Assess the functioning of media applications, software assets and project organization.
- MLO 6.5 Integrate external hardware and software in implementing inter-application connectivity and synchronisation.

### 6.6.3 Rationale for inclusion of the module in the programme and its contribution to the overall IPLOs

Managing computer systems and troubleshooting problems is an essential skill in a modern audio environment. Being able to solve issues outside of the standard music or audio packages is vital to the smoother running of projects in any digital audio environment. This module particularly focuses on the learner's ability to achieve Programme Learning Outcome 3. This module also serves as prior learning in achieving Outcome 8.

### 6.6.4 Information Provided to Learners about the Module

Learners enrolled on this module will receive a copy of the module descriptor and assignment briefs, including an outline of the criteria for assessment.

Previous examples of assignments are also presented to the class.

### 6.6.5 Module Content, Organisation, and Structure

The module is organised to deliver theory through lectures (2 hours) and supervised tutorials (1 hour). During tutorials, each learner will have a workstation allowing the lecturer to work individually with learners to demonstrate and explain the material.

The lectures each week will combine lecture delivery and discussion on the material.

Each lecturer has a time allocated for one-to-one meetings with learners as required. These are not mandatory sessions but available either where the lecturer wishes to discuss an element of the module with a learner, or a learner requests a meeting to discuss a particular topic. These sessions focus on academic issues only.

## **Module Content:**

### **Digital concepts relating to foundational hardware and software constructs of the AV workstation**

- A clear comprehension of number bases, logic operators, rudimentary dc circuits and relevant common digital protocols.

### **Hardware and software components necessary to workstation commissioning.**

- A demonstration of a workstation installation encompassing:
  - Hardware configuration
  - Software installation and customization
  - Troubleshooting exercise based on tutor intervention

### **Employing modern operating systems to deploy software, manage, backup and integrate Cloud Services**

- A demonstrable deployment workflow of a project archive and backup strategy utilizing:
  - Local nearline backup
  - Far-line backup
  - Remote cloud storage

### **Media applications, software assets and project organization**

- A devised workflow for transferring recording projects between DAW applications and different studio environments.

### **Implementing inter-application connectivity and synchronisation**

- A practical demonstration of integrating a host DAW with:
  - external devices such as network storage, WIFI controllers etc.
  - correctly configured slave rewire and IAC driver applications and instruments

## **6.6.6 Module Teaching and Learning Strategy**

The module is delivered using a combination of lectures, tutorials and practical lab computer sessions. The emphasis is on developing practical skills based on sound theoretical knowledge. It is not enough for learners to understand the theory in a module such as this. A lot of emphasis is put on the lab work, but also in emphasising to the learners that they need to work on the material outside the lab. Most learners will have previous experience with computers. This module will enable them to configure and troubleshoot issues for multi-media workflows.

Activity	Teaching / Learning Strategy	Learning Environment
<b>Lectures (24 hours)</b>	Lectures / participative discussions / demonstrations of correct procedures for connecting music technology hardware and software	College
<b>Tutorial (12 hours)</b>	Training in and use of computer skills / practical implementation of skills using computers and AV workstations / problem solving exercises / analysis of music technology techniques and recording software packages	College / Mac lab
<b>Assignment (48 hours)</b>	Practice learning and perfecting live music performance technology skills	College / Studio
<b>Independent Work (41 hours)</b>	Directed and self-directed learning / home study / use of college live sound equipment	College / Home

### 6.6.7 Timetabling, Learner Effort and Credit

The module is timetabled as one 3-hour session for the whole class. Generally, this will consist of a 2-hour lecture followed by a 1-hour tutorial / practical class on workstations. The number of credits assigned to this module is our assessment of the amount of learner effort required. It is our view that 5 ECTS of learner effort is required by learners coming new to the material to achieve the learning outcomes required.

### 6.6.8 Work-based Learning and Practice-placement.

There is no work based learning or practical placement involved in the module.

### 6.6.9 E-Learning

The College VLE is used to disseminate notes, advice and online resources to support the learners. The learners are also given access to Lynda.com as a resource for reference.

### 6.6.10 Module Physical Resource Requirements

Requirements are for a fully equipped lecture hall and access for learners to 1.5 hour sessions in a computer lab. Software required for this module is general computer software. A standard DAW, and a network based server.

### 6.6.11 Reading lists and other Information Resources.

#### Recommended reading

- Pogue, D. (2015) *OS X El Capitan: the missing manual*. Sebastopol: O'Reilly Media.  
 Nahmani, D. (2015) *Apple Pro Training Series: Logic Pro X 10.1: professional music production*. Peachpit Press.  
 Pejrolo, A. (2011) *Creative sequencing techniques for music production: a practical guide to Pro Tools, Logic, Digital Performer, and Cubase*. Oxford: Focal Press.  
 Petzhold, Charles (2000). *Code - The Hidden Language of Computer Hardware and Software*. Microsoft Press, 1st Edition  
 Cook, Frank D (2015). *Pro Tools 101: Pro Tools Fundamentals I*. Avid Learning Partner Program.

#### Secondary reading

Hewitt, M. (2009). *Composition for computer musicians*, Boston: Course Technology.  
 Holmes, T. (2015) *Electronic and experimental music: technology, music, and culture*. New York: Routledge.  
 Rhind-Tutt, M. (2009) *Music technology from scratch*, London: Rhinegold Education.  
 Grimes, Brad (2014). *Networked Audio Visual Systems*. McGraw - Hill Education  
 Schildt, Herbert (2014). *Java: A Beginners Guide*. McGraw - Hill Education  
 Mims III, Forest M (2003). *Getting Started in Electronics*. Master Publishing Inc.  
 Roads, C. (1996) *The Computer Music Tutorial*. Boston: MIT Press

### 6.6.12 Specifications for Module Staffing Requirements

For each instance of the module, there will be one lecturer qualified to at least Bachelor of Arts (Honours) level in Music Technology or equivalent and with a relevant third level teaching qualification (e.g. Certificate in Training and Education). Depending on numbers a lab assistant may be required. Where this is the case the Assistant will be required to have a sound understanding of computing and digital audio workstations and workflows, either through industry experience or academic qualification. For example, a final year Bachelor of Arts (Honours) Music Production learner may be suitable to assist the lecturer in lab sessions. Any lab assistant will work under the supervision of the lecturer.

### 6.6.13 Module Summative Assessment Strategy

Element No	Weighting	Type	Description	Learning outcomes assessed
1	40%	Assignment	Design and implement effective, efficient and secure system and session backup solution.	6.2, 6.3
2	60%	Assignment	Demonstrate multi-machine DAW synchronization across both network and IAC driver protocols. An accompanying tech log should also include an outline of digital audio concepts within AV computing.	6.1, 6.3 – 6.5

### 6.6.14 Sample Assessment Materials

#### Assessment 1:

##### Backup Solution design.

Learners are required to design and test a backup and archive solution for both system and media backup on a multimedia computer system.

Supporting documentation to be included.

#### Assessment 2:

##### Multi machine DAW Synchronisation

Learners will be required to correctly setup and operate a synchronised multi-DAW system utilising network or IAC driver protocol.

Supporting documentation to be included.



## 6.7 Module 7: Sound Reinforcement 1

<b>Module Title</b>	Sound Reinforcement
<b>Module NFQ Level (only if an NFQ level can be demonstrated)</b>	6
<b>Module number/Reference</b>	BAAMT107
<b>Parent Programme</b>	BA (Hons) in Audio and Music Technology
<b>Stage of Parent Programme</b>	1
<b>Semester</b>	1
<b>Module Credit Units (FET/HET/ECTS)</b>	ECTS
<b>Module Credit number of Units</b>	5
<b>List the teaching and learning modes</b>	FT
<b>Entry requirements (statement of knowledge, skill and competence)</b>	Learner has earned Level 5 qualification. No previous experience is required
<b>Pre-requisite module titles</b>	None
<b>Co-requisite module titles</b>	None
<b>Is this a capstone module? (Yes or No)</b>	No
<b>Staff qualifications (academic, pedagogical and professional/occupational) and experience required. (staff includes workplace personnel who are responsible for learners such as apprentices, trainees and learners in clinical placements)</b>	Staff are required to have at least a Bachelor of Arts (Honours) qualification in Music Technology or related discipline. Industry experience would be a benefit but is not a requirement. Staff are expected to have the Certificate in Training and Education qualification from Griffith College or its equivalent.
<b>Staff/learner ratio per centre (or instance of the module)</b>	For lecture load, ratio of 1:50 lecturer to learner is required and in lab sessions the maximum allowed is 1:25 The lecturer will also have 1 hour per week set aside in their timetable for 1:1 contact with learners who require it or have particular items they want to discuss.
<b>Maximum number of learners per centre (or instance of the module)</b>	50
<b>Duration of the Module</b>	One Academic Semester, 12 weeks teaching
<b>Average (over the duration of the module) of the contact hours per week.</b>	3
<b>Physical resources and support required per centre (or instance of the module)</b>	One lecture hall with capacity at least 50 and one practical lab with PA system.

Analysis of Required Learning Effort									
Effort while in contact with staff									
Classroom and Demonstrations	Mentoring and small group tutoring	Other (Specify)		Directed e-learning (hours)	Independent learning (hours)	Other hours (specify)	Work-based learning hours of Learning effort	Total Effort (hours)	Minimum ratio teacher/learner
		Hours	Minimum ratio teacher/learner						
24	12				89			125	1:50
Allocation of marks (within the module)									
				Continuous Assessment	Supervised Project	Proctored practical	Proctored Written Examination	Total	
Percentage contribution					100%			100%	

### 6.7.1 Module Objectives

The module introduces learners to the live sound environment, health & safety, equipment, techniques and standard procedures utilized in producing live sound for an event. It also develops team building and communication skills.

### 6.7.2 Minimum Intended Module Learning Outcomes

On successful completion of this module, the learner will be able to:

- MLO 7.1 Design and select the component parts of a multipurpose sound reinforcement system.
- MLO 7.2 Demonstrate adherence to Health and Safety requirements in a live sound environment.
- MLO 7.3 Recognize factors that affect the quality of reinforced sound and implement corrective and creative procedures.
- MLO 7.4 Practically apply knowledge of live sound system specifications, rigging and operation.

### 6.7.3 Rationale for inclusion of the module in the programme and its contribution to the overall IPLOs

Live sound is an important discipline in the world of Audio. A large number of applicants to our current and previous courses apply with the intention of gaining employment within the 'Live' sound sector. A lot of applicants' previous experience is in live sound, either through school or community groups, or through PA companies. The Learning outcomes on this module contribute to the learner's attainment of Programme Learning Outcome 7. The learning here is also essential as preliminary to achieving Programme Learning Outcome 8 and 10.

### 6.7.4 Information Provided to Learners about the Module

Learners enrolled on this module will receive a copy of the module descriptor and assignment briefs, including an outline of the criteria for assessment.

Previous examples of assignments are also presented to the class.

### 6.7.5 Module Content, Organisation and Structure

The module is organised to deliver theory through lectures (2 hours) and supervised tutorials (1 hours). During tutorials, Learners are split into smaller groups of between 10 and 15 at the start of the module. This will allow the lecturer to work with smaller groups to demonstrate the material. Each learner will remain in the same group for the duration of the module.

The lectures each week will combine lecture delivery and discussion on the material.

Each lecturer has a time allocated for one-to-one meetings with learners as required. These are not mandatory sessions but available either where the lecturer wishes to discuss an element of the module with a learner, or a learner requests a meeting to discuss a particular topic. These sessions focus on academic issues only.

**Module Content:****Live sound system specification, rigging and operation**

- Technical specifications for a Sound reinforcement system.
- Production of a clear stage plan and channel list.

**Recognize factors that affect the quality of reinforced sound and implement corrective and creative procedures**

- Setup of a basic PA system.
- Tuning a PA system.
- Utilize creative processing appropriately for a live sound setting

**Awareness of Health and Safety in a live sound environment**

- Safe positioning and securing of all items of equipment, cable runs etc.
- Awareness of fire exits and other potential hazards, such as blocking passages with flight cases.

**Ability to design and select the component parts of a multi-purpose sound reinforcement system**

- Research, design and justify suitable equipment for a given specification and budget.
- How to match amplifiers and loudspeakers.
- Inclusion of all items of PA equipment essential to correctly run a small event.

**6.7.6 Module Teaching and Learning Strategy**

The module is delivered through a combination of lectures and tutorials. The emphasis is on developing practical skills based on sound theoretical knowledge. It is not enough for learners to understand the theory in a module such as this. They need to practically apply skills in a systematic way. The weekly tutorials ensure they systematically work on each aspect of Live Sound from planning stages to realisation of an event. A lot of emphasis is put on the practical work. Live Sound is not an easy competence to develop and requires a lot of practice.

Activity	Teaching / Learning Strategy	Learning Environment
<b>Lectures (24 hours)</b>	Lectures / participative discussions / case studies / practical demonstrations of practical concepts, theory, system components, rigging and de-rigging / demonstration of equipment	College
<b>Tutorials (12 hours)</b>	Practicing sound reinforcement skills / Practical implementation of skills using sound equipment / training in use of equipment	College / Studio
<b>Assignment (48 hours)</b>	Practice learning and perfecting sound reinforcement skills	College / Studio
<b>Independent Work (41 hours)</b>	Directed and self-directed learning / home study / practice using college resources	College / Home

### 6.7.7 Timetabling, Learner Effort and Credit.

The module is timetabled as one 3-hour class for the whole class. Generally, this will consist of a 2-hour lecture followed by a 1-hour tutorial / practical class using a PA system.

The number of credits assigned to this module is our assessment of the amount of learner effort required. It is our view that 5 ECTS of learner effort is required by learners coming new to the material to achieve the learning outcomes required.

### 6.7.8 Work-based Learning and Practice-placement

There is no work based learning or practical placement involved in the module.

### 6.7.9 E-Learning

The College VLE is used to disseminate notes, advice and online resources to support the learners. The learners are also given access to Lynda.com as a resource for reference.

### 6.7.10 Module Physical Resource Requirements

Requirements are for a fully equipped lecture hall and access for each group to a 1-hour session with a PA system. The PA system should have the means to control and configure calibration settings for the PA.

### 6.7.11 Reading lists and other Information Resources

#### Recommended reading

- Amundson, M. (2007) *Live sound: theory & practice*. Las Vegas: Timeless Communication  
Biederman, R. & Pattison, P. (2013) *Basic sound reinforcement*. Oxford: Focal Press  
Davis, G. & Jones, R. (1990) *Sound reinforcement handbook*, Milwaukee: Hal Leonard Corporation.  
Hannam, C (2015) *Health and safety management in the live music and event technical industry*. Cambridge: Entertainment Technology Press.

#### Secondary reading

- Duncan, B. (2002) *The live Sound manual*. San Francisco: Backbeat Books  
Eargle, J. & Foreman, C. (2008) *JBL audio engineering for sound reinforcement*. Milwaukee: Hal Leonard Corporation.  
Gibson, B. (2011) *Ultimate live sound operator's handbook*. Milwaukee: Hal Leonard Corporation.  
Hunter-Stark, S. (2005) *Live sound reinforcement*. Milwaukee: Hal Leonard Corporation.  
Moscal, T (1994) *Sound check: basics of sound & sound systems*. Milwaukee: Hal Leonard Corporation.  
McCarthy, B. (2006) *Sound Systems: Design and Optimization*. Oxford: Focal Press.  
Rayburn, R. (2011) *Eargle's The microphone book: from mono to stereo to surround - a guide to microphone design and application*. Oxford: Focal Press  
Van Beek, M. (2004) *Electrical safety for live events*. Cambridge: Entertainment Technology Press.  
White, P. (2000) *Basic effects and processors*. London: Sanctuary Publishing Ltd.  
White, P. (2000) *Basic live sound*. Sanctuary Publishing Ltd.

## Journals

Sound on Sound. Cambridge: SOS Publications Group

Audio Engineering Society Journal. New York: AES

### 6.7.12 Specifications for Module Staffing Requirements

For each instance of the module, there will be one lecturer qualified to at least Bachelor of Arts (Honours) level in Sound Engineering or equivalent, and with a relevant third level teaching qualification (e.g. Certificate in Training and Education). Depending on numbers a lab assistant may be required. Where this is the case the Assistant will be required to have a sound understanding of Live sound concepts and workflows, either through industry experience or academic qualification. For example, a final year Bachelor of Arts (Honours) Music Production learner may be suitable to assist the lecturer in lab sessions. Any lab assistant will work under the supervision of the lecturer.

### 6.7.13 Module Summative Assessment Strategy

The assessment is based on a practical assignment (60%) and a written report (40%).

Element No	Weight	Type	Description	Learning outcomes assessed
1	60%	Practical Assignment	Learners are required to position and connect a PA system including Mixing Console, Processing units and speakers. Learners will then be required to calibrate and tune the system to their own taste using music and voice.	7.2 - 7.4
1	40%	Project Report	Learners are required to research and produce a feasibility report consisting of a proposal for the live sound re-enforcement requirements for a live event at a venue. For this report, learners should include details on a programme of events and the technical requirements for each act. Tutors will assist in the taking of team roles within the group as each learner should be clearly able to state their exact role in the proceedings. The report must also include all details of risk assessment and any health and safety issues of the venue.	7.1 – 7.4

These assignments are focused on real world workflows and issues. The emphasis here will be on adhering to professional workflows and practices.

#### 6.7.14 Sample Assessment materials.

##### **Assessment 1: P.A. Setup and Tuning.**

Each participant will setup a basic Public Address system. This will include positioning of speaker system and sound desk. All equipment will be connected using appropriate cables and connectors. Attention will be paid to health and safety issues such as cable runs and power up procedures and manual handling techniques. Once setup, each participant will calibrate and tune the system using either music or their own voice so achieve sonic clarity. (30-minute timeframe)

##### **Assessment 2: Feasibility Report:**

Participants are required to produce a feasibility report for a Live performance event. This event can include acts from music to dialog based acts and/or any other type of performance requiring live sound reinforcement.

The report will include details on:

- Technical requirements for each act.
- An event schedule/timetable.
- Personnel - roles and responsibilities.
- A Risk assessment of the venue for the event outlining any/all health and safety issues.

## 6.8 Module 8: Sound Design and Foley FX

<b>Module Title</b>	Sound Design and Foley FX
<b>Module NFQ Level (only if an NFQ level can be demonstrated)</b>	6
<b>Module number/Reference</b>	BAAMT108
<b>Parent Programme</b>	BA (Hons) in Audio and Music Technology
<b>Stage of Parent Programme</b>	1
<b>Semester</b>	2
<b>Module Credit Units (FET/HET/ECTS)</b>	ECTS
<b>Module Credit number of Units</b>	5
<b>List the teaching and learning modes</b>	FT
<b>Entry requirements (statement of knowledge, skill and competence)</b>	Learner has earned Level 5 qualification. No previous experience is required
<b>Pre-requisite module titles</b>	None
<b>Co-requisite module titles</b>	None
<b>Is this a capstone module? (Yes or No)</b>	No
<b>Staff qualifications (academic, pedagogical and professional/occupational) and experience required. (staff includes workplace personnel who are responsible for learners such as apprentices, trainees and learners in clinical placements)</b>	Staff are required to have at least a Bachelor of Arts (Honours) qualification in Music Technology or related discipline. Industry experience would be a benefit but is not a requirement. Staff are expected to have the Certificate in Training and Education qualification from Griffith College or its equivalent.
<b>Staff/learner ratio per centre (or instance of the module)</b>	For lecture load, ratio of 1:50 lecturer to learner is required and in lab sessions the maximum allowed is 1:25 The lecturer will also have 1 hour per week set aside in their timetable for 1:1 contact with learners who require it or have particular items they want to discuss.
<b>Maximum number of learners per centre (or instance of the module)</b>	50
<b>Duration of the Module</b>	One Academic Semester, 12 weeks teaching
<b>Average (over the duration of the module) of the contact hours per week.</b>	3
<b>Physical resources and support required per centre (or instance of the module)</b>	One lecture hall with capacity at least 50 and one practical lab with PA system.



Analysis of Required Learning Effort									
Effort while in contact with staff									
Classroom and Demonstrations	Mentoring and small group tutoring		Other (Specify)		Directed e-learning (hours)	Independent learning (hours)	Other hours (specify)	Work-based learning hours of <small>learning effort</small>	Total Effort (hours)
	Hours	Minimum ratio teacher/learner	Hours	Minimum ratio teacher/learner					
24	1:50	12	1:25			89			125
Allocation of marks (within the module)									
					Continuous Assessment	Supervised Project	Proctored practical	Proctored Written Examination	Total
Percentage contribution						40%	60%		100%

### 6.8.1 Module Objectives

The aim of this module is to introduce the learners to the practice of sound design using field and studio recording techniques, as well as the practice of sound design using synthesis. Comprising the use of recording and editing techniques, plus synthesis techniques in the creation of soundscapes and sound effects. The principles of audio theory will be examined through a survey of historical and practical process within sound design.

### 6.8.2 Minimum Intended Module Learning Outcomes

On successful completion of this module the learner will be able to:

- MLO 8.1 Present the basic concepts of sound design.
- MLO 8.2 Demonstrate an understanding of sound effect capture and editing.
- MLO 8.3 Evidence a basic knowledge of sound effect production using Foley and synthesis.
- MLO 8.4 Illustrate an analysis of the key techniques used in sound design in films and games.

### 6.8.3 Rationale for inclusion of the module in the programme and its contribution to the overall IPLOs.

This module marks the beginning of the sound design elements, exploring the wider world of sound design and Foley effects. This will enable learners to become skilled in the multi-disciplinary audio environment. The learning in this module will contribute specifically to Programme Learning Outcomes 1, 3 and 12, while also helping learners in achieving outcome 4 and 6.

### 6.8.4 Information Provided to Learners about the Module

Learners enrolled on this module will receive a copy of the module descriptor and assignment briefs, including an outline of the criteria for assessment.

Previous examples of assignments are also presented to the class.

### 6.8.5 Module Content, Organisation and Structure

The module is organised to deliver theory through lectures (2 hours) and supervised tutorials (1 hour). During tutorials, learners will work individually on computer workstations. This will allow the lecturer to work with smaller groups to demonstrate the material. The lectures each week will combine lecture delivery and discussion on the material.

Each lecturer has a time allocated for one-to-one meetings with learners as required. These are not mandatory sessions but available either where the lecturer wishes to discuss an element of the module with a learner, or a learner requests a meeting to discuss a particular topic. These sessions focus on academic issues only.

## Module Content

### Basics of sound design and Foley FX

- Key principles of microphones technique
- Key principles of subtractive synthesis
- Definitions of Foley and soundscape
- Concepts within the world of film and game sound.

### Recording and editing techniques

- Microphone choice, placement and usage
- Critical listening skills
- Audio editing practice

### Sound synthesis

- Subtractive synthesis
- Sequencing techniques

### Audio production and sound design concepts

- Evidence of research
- Audio production using recording techniques
- Audio production using synthesis
- Key practitioners & seminal works

## 6.8.6 Module Teaching and Learning Strategy

This module is delivered using a combination of lectures, tutorials and practical sessions. The emphasis is on developing skills such as recording and synthesis techniques used for sound design. The emphasis will be on learners to take the theoretical knowledge and apply it practically to develop the skills required. Learners will need to work on material outside of the lab and in studios. Industry professionals will be brought in to do workshops and discuss standards, techniques and best practice for sound design and Foley effects recording.

Activity	Teaching / Learning Strategy	Learning Environment
<b>Lectures (24 hours)</b>	Lectures / participative discussions / case studies of industry standard sound design work and historical practitioners / demonstrations of current sound design techniques, Foley and synthesis	College
<b>Tutorial (12 hours)</b>	Practicing use of sound design and Foley recording techniques / training in use of DAW, recording techniques and sound synthesis in relation to sound design / practical work linking theory and practice	College / Mac lab
<b>Assignment (48 hours)</b>	Practice learning and perfecting sound design skills	College
<b>Independent Work (41 hours)</b>	Directed and self-directed learning / home study	College / Home

### 6.8.7 Timetabling, Learner Effort and Credit

Lectures will be provided on a whole-class basis in two hour sessions. These will be followed by 1-hour tutorials on workstations with smaller groups allowing the lecturer to work individually with learners to demonstrate the material.

It is our view that 5 ECTS of learner effort is required by learners coming new to the material to achieve the learning outcomes required.

### 6.8.8 Work-based Learning and Practice-placement

There is no work based learning or practical placement involved in the module.

### 6.8.9 E-Learning

The College VLE is used to disseminate notes, advice and online resources to support the learners. The learners are also given access to Lynda.com as a resource for reference.

### 6.8.10 Module Physical Resource Requirements

Requirements are for a fully equipped lecture hall and access for each group to a 1.5 lab with computer workstations. Each workstation should have audio synthesis and editing software. Learners will require bookable studio access for recording elements.

### 6.8.11 Reading Lists and other Information Resources

#### Recommended Reading

Viers, R. (2014) *The sound effects bible: how to create and record Hollywood style sound effects*. Studio City: Michael Wiese Productions.

Beauchamp, R. (2005) *Designing sound for animation*. Oxford: Focal Press.

Arment, V. (2014) *The foley grail: the art of performing sound for film, games and animation*. Oxford: Focal Press.

Sonnenschein, D. (2001) *Sound design: the expressive power of music, voice, and sound effects in cinema*. Studio City: Michael Wiese Productions

#### Secondary Reading

<http://filmsound.org><http://filmsound.org>

<http://soundonsound.com>

### 6.8.12 Specifications for Module Staffing Requirements

For each instance of the module, there will be one lecturer qualified to at least Bachelor of Arts (Honours) level in Music Technology or equivalent and with a relevant third level teaching qualification (e.g. Certificate in Training and Education). Depending on numbers a lab assistant may be required. Where this is the case the Assistant will be required to have a sound understanding of sound design, either through industry experience or academic qualification. For example, a final year Bachelor of Music Production (Honours) learner may be suitable to assist the lecturer in lab sessions. Any lab assistant will work under the supervision of the lecturer.

### 6.8.13 Module Summative Assessment Strategy

The assessment is based on a written report and a practical assignment.

Assessment Element	Percentage Weighting	Description	Module Outcomes
Assignment	40%	Document: Analysis of a film soundtrack, including a brief overview of the sound designer	8.1, 8.2, 8.4
Assignment	60%	Project: Replace the sound design for an animated film clip and accompanying technical log.	8.1 - 8.4

### 6.8.14 Summative Assessment Materials

#### Assessment 1

**Document:**

Select a film scene from either Polar Express (Randy Thom, 2004) or Apocalypse Now (Walter Murch, 1979).

Construct an analysis and description of the techniques employed in the sound design of your chosen scene. Include a brief overview of the sound designer in your document.

Approximate length 1,500 to 1,800 words.

#### Assessment 2

**Project:**

Replace the sound design for Wall-E (Ben Burtt, 2008) "Repair Ward" scene.

<http://www.youtube.com/watch?v=iigKPkLB5IQ>

The final audio must be delivered as a 44.1kHz, 16bit, .wav file.

Include a document that describes an overview of your workflow and production.

## 6.9 Module 9: Online Portfolio.

<b>Module Title</b>	Online Portfolio
<b>Module NFQ Level (only if an NFQ level can be demonstrated)</b>	6
<b>Module number/Reference</b>	BAAMT109
<b>Parent Programme</b>	BA (Hons) in Audio and Music Technology
<b>Stage of Parent Programme</b>	1
<b>Semester</b>	2 and summer
<b>Module Credit Units (FET/HET/ECTS)</b>	ECTS
<b>Module Credit number of Units</b>	5
<b>List the teaching and learning modes</b>	FT
<b>Entry requirements (statement of knowledge, skill and competence)</b>	Learner has earned Level 5 qualification. No previous applications technology ability is required.
<b>Pre-requisite module titles</b>	None
<b>Co-requisite module titles</b>	None
<b>Is this a capstone module? (Yes or No)</b>	No
<b>Staff qualifications (academic, pedagogical and professional/occupational) and experience required. (staff includes workplace personnel who are responsible for learners such as apprentices, trainees and learners in clinical placements)</b>	Staff are required to have at least a Bachelor of Arts (Honours) qualification in Music Technology or related discipline. Industry experience would be a benefit but is not a requirement. Staff are expected to have the Certificate in Training and Education qualification from Griffith College or its equivalent.
<b>Staff/learner ratio per centre (or instance of the module)</b>	For lecture load, ratio of 1:50 lecturer to learner is required and in lab sessions the maximum allowed is 1:25 The lecturer will also have 1 hour per week set aside in their timetable for 1:1 contact with learners who require it or have particular items they want to discuss.
<b>Maximum number of learners per centre (or instance of the module)</b>	50
<b>Duration of the Module</b>	One Academic Semester, 12 weeks teaching
<b>Average (over the duration of the module) of the contact hours per week.</b>	3
<b>Physical resources and support required per centre (or instance of the module)</b>	One lecture hall with capacity at least 50 and one computer lab with capacity of 25.

Analysis of Required Learning Effort									
Effort while in contact with staff									
Classroom and Demonstrations	Mentoring and small group tutoring	Other (Specify)		Directed e-learning (hours)	Independent learning (hours)	Other hours (specify)	Work-based learning hours of <small>learning effort</small>	Total Effort (hours)	
		Hours	Minimum ratio teacher/learner						Hours
24	12	1:50	1:25		89			125	
Allocation of marks (within the module)									
				Continuous Assessment	Supervised Project(s)	Proctored practical	Proctored Written Examination	Total	
Percentage contribution					100%			100%	

### 6.9.1 Module Aims and Objectives

This module aims to enable the learner to develop, present and promote their portfolio of work using online platforms.

Learners are required to compile their portfolio of work using material/artefacts generated throughout the academic year and present to a panel using a functioning website or social media profile appropriate to their needs.

### 6.9.2 Minimum Intended Module Learning Outcomes

On successful completion of this module the learner will be able to:

MLO X.1	Evaluate commercial web-based audio retail and marketing services.
MLO X.2	Design and build an online promotional profile with a design tailored to the learner's creative output.
MLO X.3	Implement and maintain an online digital portfolio of works.
MLO X.4	Devise and present co-ordinated social networking strategies.

### 6.9.3 Rationale for inclusion of the module in the programme and its contribution to the overall IPLOs

This module aims to develop the learners skills to develop an online promotional presence using communication strategies appropriate to the promotion of services and products in the audio/music sector. This online presence will form the basis of the learner's communication with subsequent clients, providing an evolving platform on which they can present their subsequent College and industry related portfolio of work.

The module addresses Programme Learning Outcomes 4 and 10 while also underpinning Outcomes 11.

### 6.9.4 Information Provided to Learners about the Module

Learners enrolled on this module will receive a copy of the module descriptor and assignment briefs, including an outline of the criteria for assessment.

Previous examples of assignments are also presented to the class.

### 6.9.5 Module Content, Organisation, and Structure

The module is organised to deliver theory through lectures (2 hours) and supervised tutorials (1 hour). During tutorials, each learner will have a workstation allowing the lecturer to work individually with learners to demonstrate and explain the material.

The 2 hour lectures each week will combine lecture delivery and discussion on the material.

Each lecturer has a time allocated for one-to-one meetings with learners as required. These are not mandatory sessions but available either where the lecturer wishes to discuss an element of the module with a learner, or a learner requests a meeting to discuss a particular topic. These sessions focus on academic issues only.



## Module Content

### Profile design and management

- Planning and designing a profile
- Graphic design
- User interface design and functionality
- Embedding images, audio and video

### File formats and website functionality

- Audio compression and formats
- Image and video compression formats
- File management and metadata
- Search engine optimisation

### Internet systems

- Music catalogues and audio databases
- Integration of social networks and blogs
- File transfer protocol and account management

### Digital communication

- Digital communication systems
- Use and integration of social networks and blogs
- Guerrilla and viral promotion strategies
- Ethical issues in relation to online communication

### Digital music delivery and social networking strategies

## 6.9.6 Module Teaching and Learning Strategy

The module is delivered through a combination of lectures and tutorials. Lectures will present an analysis of industry case studies, focussing on profile design and marketing strategies. Technical skills and graphic design considerations will be presented in lectures. Practical sessions in the labs will present the software required to design and build an online presence.

Activity	Teaching / Learning Strategy	Learning Environment
<b>Lectures (24 hours)</b>	Lectures / participative discussions / will present an analysis of industry case studies focussing on social media profile design, marketing strategies, graphic design approaches and technical considerations.	College
<b>Tutorial (12 hours)</b>	Practical sessions in the labs will present the resources required to design and build an online presence using industry standard software.	College / Mac lab
<b>Assignment (48 hours)</b>	Practice learning and implementing social media based skills to create an online presence.	College
<b>Independent Work (16 hours)</b>	Directed and self-directed learning / home study / access to online resources	College / Home

### 6.9.7 Timetabling, Learner Effort and Credit

The module is timetabled as one 3-hour lecture to the whole class. This will consist of the 2-hour lecture, and a one hour lab tutorial. In the labs, the learners engage directly with web design software.

The number of credits assigned to this module is our assessment of the learner effort required. It is our view that 5 ECTS of learner effort is required by learners coming new to the material to achieve the learning outcomes required.

### 6.9.8 Work-based Learning and Practice-placement

There is no work based learning or practical placement involved in the module.

### 6.9.9 E-Learning

The College VLE is used to disseminate notes, advice and online resources to support the learners. The learners are also given access to Lynda.com as a resource for reference.

### 6.9.10 Module Physical Resource Requirements

Requirements are for a fully equipped lecture hall and access for each group to 1-hour sessions in a computer lab. The stations should have broad band internet access and be equipped current versions of internet web browsers and any other applicable software.

### 6.9.11 Reading lists and other learning materials

#### Recommended reading

Chapman, N.P. & Chapman, J., 2006. *Web design: a complete introduction*, Chichester: J. Wiley.

Fenwick, I & Wertime, K (2008) *DigiMarketing: The Essential Guide to New Media and Digital Marketing*, Hoboken

Gordon, S., 2011. *The future of the music business: how to succeed with the new digital technologies: a guide for artists and entrepreneurs*, Milwaukee WI: Hal Leonard Books.

Wikström, P., 2009. *The music industry: music in the cloud*, Cambridge; Malden MA: Polity.

Oswinski B., 2017. *Social Media Promotion for Musicians, Artists and Engineers*. Lynda.com

Batesole, B., 2017 *Social Media Marketing: Facebook and Twitter*. Lynda.com

Chapman, C.C., 2015 *Content Marketing: Photos*. Lynda.com

Oswinski, B., 2017 *Social Media Basics for Musicians and Bands*. Lynda.com

### Secondary reading

- Allen, P., 2011. *Artist management for the music business*, Oxford: Focal Press.
- Baker, B., 2011. *Guerrilla music marketing online: 129 free and low-cost strategies to promote and sell your music on the internet*, St. Louis MO: Spotlight Publications.
- Gralla, P., 2007. *How the Internet works*, Indianapolis: Que.
- Hutchison, T., 2008. *Web marketing for the music business*, Oxford :Focal Press.
- Lynch, P., 2008. *Web style guide: basic design principles for creating Web sites*, New Haven Conn. [u.a.]: Yale University Press.
- Turban, E. & King, D., 2011. *Electronic commerce 2012: managerial and social networks perspectives*, London: Prentice Hall.
- Watrall, E., 2009. *Head first web design*, Beijing; Cambridge: O'Reilly.

### 6.9.12 Specifications for Module Staffing Requirements

For each instance of the module, there will be one lecturer qualified to at least Bachelor of Arts (Honours) level in Music or equivalent, and with a relevant third level teaching qualification (e.g. Certificate in Training and Education). Depending on numbers, a lab assistant may be required. Where this is the case the assistant will be required to have a sound understanding of music theory, either through industry experience or academic qualification. For example, a final year Bachelor of Music Production (Honours) learner may be suitable to assist the lecturer in lab sessions. Any lab assistant will work under the supervision of the lecturer.

### 6.9.13 Module Summative Assessment Strategy

Name	Description	Weighting	Learning Outcomes
Assignment 1:	Research and Development. For this assignment, learners will research and develop a specific service or product element and produce an outline proposal for the online profile.	30%	X.1 – X.2
Assignment 2:	Online Profile Design and Delivery. The finished profile goes live on line and an evaluative report is submitted. Learners present the finished project to their peers.	70%	X.3 – X.4

## 6.9.14 Sample Assessment Materials

### E-Portfolio and Online Development

#### **Assignment 1 brief:**

Date: T.B.C.

Time: T.B.C.

Research and Development. For this assignment, learners will research and develop a specific service or product element and produce an outline proposal for a social media profile.

#### **Assignment 2 brief:**

Date: T.B.C.

Time: T.B.C.

Working individually you must devise and design an online social media presence to exploit your portfolio of work through the Internet. The profile can be simple in design, but it must be fit for your desired purpose and produced to professional standards. You must manage all aspects of this production process and workflow. Your project must demonstrate knowledge of the following:

- basic online profile design
- self-representation and USP
- design and usability
- logo/branding/visual identity
- online communities and networks
- implimentation of audio visual materials

## 6.10 Module 10: Music Technology 2

<b>Module Title</b>	Music Technology 2
<b>Module NFQ Level (only if an NFQ level can be demonstrated)</b>	7
<b>Module number/Reference</b>	BAAMT201
<b>Parent Programme</b>	BA (Hons) in Audio and Music Technology
<b>Stage of Parent Programme</b>	2
<b>Semester</b>	1 and 2
<b>Module Credit Units (FET/HET/ECTS)</b>	ECTS
<b>Module Credit number of Units</b>	10
<b>List the teaching and learning modes</b>	FT
<b>Entry requirements (statement of knowledge, skill and competence)</b>	Learner has earned Level 5 qualification. No previous music technology ability is required
<b>Pre-requisite module titles</b>	No
<b>Co-requisite module titles</b>	No
<b>Is this a capstone module? (Yes or No)</b>	No
<b>Staff qualifications (academic, pedagogical and professional/occupational) and experience required. (staff includes workplace personnel who are responsible for learners such as apprentices, trainees and learners in clinical placements)</b>	Staff are required to have at least a Bachelor of Arts (Honours) qualification in Music Technology or related discipline. Industry experience would be a benefit but is not a requirement. Staff are expected to have the Certificate in Training and Education qualification from Griffith College or its equivalent.
<b>Staff/learner ratio per centre (or instance of the module)</b>	For lecture load, ratio of 1:50 lecturer to learner is required and in lab sessions the maximum allowed is 1:25 The lecturer will also have 1 hour per week set aside in their timetable for 1:1 contact with learners who require it or have particular items they want to discuss.
<b>Maximum number of learners per centre (or instance of the module)</b>	50
<b>Duration of the Module</b>	Two Academic Semesters, 24 weeks teaching
<b>Average (over the duration of the module) of the contact hours per week.</b>	3
<b>Physical resources and support required per centre (or instance of the module)</b>	One lecture hall with capacity at least 50 and one computer lab with capacity of 25.

Analysis of Required Learning Effort									
Effort while in contact with staff									
Classroom and Demonstrations	Mentoring and small group tutoring		Other (Specify)		Directed e-learning (hours)	Independent learning (hours)	Other hours (specify)	Work-based learning hours of learning effort	Total Effort (hours)
	Hours	Minimum ratio teacher/learner	Hours	Minimum ratio teacher/learner					
48	1:50	24	1:12			178			250
Allocation of marks (within the module)									
					Continuous Assessment	Supervised Project	Proctored practical	Proctored Written Examination	Total
Percentage contribution						70%	30%		100%

### 6.10.1 Module Aims and Objectives

This module aims to develop the learner's ability to use the MIDI protocol through advanced editing techniques within Software MIDI systems. Learners develop their knowledge of synthesis via further study of alternative synthesis methods (Additive, Granular, Frequency Modulation, Physical modelling), and further their knowledge of sampling via sampler scripting within advanced sampler frameworks. Learners explore rhythm, polyrhythm and polymeter and the essential techniques and principles of effective drum programming. Essential and established techniques and practices will be underpinned by a survey of creative practitioners and their work within this area.

### 6.10.2 Minimum Intended Module Learning Outcomes

On successful completion of this module the learner will be able to:

- MLO 10.1 Illustrate advanced Synthesis Methods.
- MLO 10.2 Demonstrate an understanding of an advanced Sampler framework and the creation of sophisticated Sample Patches.
- MLO 10.3 Employ MIDI Editing techniques to an advanced level.
- MLO 10.4 Use drum programming to a professional standard.
- MLO 10.5 Complete sophisticated research both individually and within a group into specialist topics and present in a class situation the findings, insights, concepts and techniques involved.

### 6.10.3 Rationale for inclusion of the module in the programme and its contribution to the overall IPLOs

As technology progresses, the functionality and practicality of computer based music software has expanded. This module will expand on the fundamentals of music technology and help develop a more creative and thorough skillset. The learning outcomes of this module relate and contribute particularly to the learner's attainment of Programme Learning Outcomes 3 and 7. The learning here is also essential as preliminary to achieving Programme Learning Outcome 4 and 5.

### 6.10.4 Information Provided to Learners about the Module

Learners enrolled on this module will receive a copy of the module descriptor and assignment briefs, including an outline of the criteria for assessment.

Previous examples of assignments are also presented to the class.

### 6.10.5 Module Content, Organisation and Structure

The module is organised to deliver theory through lectures (2 hours) and supervised tutorials (1 hour). During tutorials, learners will work individually on computer workstations. This will allow the lecturer to work with smaller groups to demonstrate the material.

The lectures each week will combine lecture delivery and discussion on the material.

Each lecturer has a time allocated for one-to-one meetings with learners as required. These are not mandatory sessions but available either where the lecturer wishes to discuss an element of the module with a learner, or a learner requests a meeting to discuss a particular topic. These sessions focus on academic issues only.

## Module Content

### Further Synthesis Methods

- An understanding of the components of an FM synthesizer, Physical-modelling synthesizer, Additive synthesizer, Granular Synthesizer.
- The signal flow and routing between these components.
- The ability to create sounds from an initialized patch within each synthesizer.
- An understanding of the Synthesis Concepts underpinning each synthesizer.

### Advanced Sampler framework and the creation of sophisticated Sample Patches

- Creation of Multi-layered Sample patches using the Round Robin and neighbour borrowing approaches.
- The setup and correct use of Key switching for larger patches utilizing the ability to switch performance articulations.
- Creation of Velocity layered sample patches, which respond to MIDI CC's for sample switching/velocity cross fading.

### Advanced MIDI Editing techniques

- The set up and correct use of MIDI input filters.
- The correct use of the MIDI Event list for midi editing and selection.
- The correct and effective use of the “separate events via” commands.
- The MIDI environment and the set-up of system.
- Correct use of and creation of MIDI transform operations.
- Basic scripting of Meta events.

### Drum Programming

- How to create rhythmic material.
- The effective layering of samples/sounds.
- How to synthesise percussive sounds from synthesizers.
- Tempo, meter, pastiche rhythms/patterns and rhythm instrumentation for modern musical styles.
- Rhythmic simple sub-divisions (crotchet, quaver, etc.), and more complex rhythmic subdivisions. (Triplets, Tuplets, swing/shuffle).

### 6.10.6 Module Teaching and Learning Strategy

This module is delivered through a combination of lectures, tutorials. These tutorials will focus on the practical skills required when using synthesizers and samplers while also demonstrating advanced MIDI editing techniques and allowing the development of drum programming skills. These skills will take time to develop. While learners may get to grips with the technical requirements, the creative and/or musical skills takes time to develop.



Activity	Teaching / Learning Strategy	Learning Environment
<b>Lectures (48 hours)</b>	Lectures / participative discussions / case studies of application of techniques in professional studio workflows / demonstrations of advanced synthesizer and MIDI principles / flipped Classroom discussion and engagement	College
<b>Tutorial (24 hours)</b>	Training in use music technology equipment / practical work linking theory and practice / use of small editing suites, recording studios and computer labs	College / Mac lab
<b>Assignment (96 hours)</b>	Practice learning and perfecting music technology skills	College
<b>Independent Work (82 hours)</b>	Directed and self-directed learning / home study	College / Home
<b>Examination (3 hours)</b>	Evaluation of knowledge and related skills	College

#### 6.10.7 Timetabling, Learner Effort and Credit

The module is timetabled as one 3-hour session to the whole class. This will consist of a 2-hour lecture, and a 1-hour tutorial with Music Tech workstations. On the workstations the learners engage directly with samplers, synthesizers, MIDI editors and drum programming software.

The number of credits assigned to this module is our assessment of the learner effort required. It is our view that 10 ECTS of learner effort is required by learners coming new to the material to achieve the learning outcomes required.

#### 6.10.8 Work-Based Learning and Practice Placement.

There is no work based learning or practical placement in the module.

#### 6.10.9 E-Learning

The College VLE is used to disseminate notes, advice and online resources to support the learners. The learners are also given access to Lynda.com as a resource for reference.

#### 6.10.10 Module Physical Resource Requirements

Requirements are for a fully equipped lecture hall and access for learners to a computer workstation with Music tech software. Access to hardware such as MIDI keyboards is also required.

### 6.10.11 Reading Lists and Other Learning Materials

#### Recommended Reading

Russ, M. (2009) *Sound synthesis and sampling*. Oxford: Focal Press.  
Manning, P. (2013) *Electronic and Computer Music* Oxford: University Press.  
Nothydurfter, C. (2015) *#HitIt!: The Ultimate Guide to Programming Drums* CreateSpace Independent Publishing Platform

#### Secondary Reading

Collins, N. (2009) *Handmade electronic music: the art of hardware hacking*. New York: Routledge.  
Emmerson, S. (2007) *Living electronic music*. Aldershot; Burlington: Ashgate.  
Hewitt, M. (2009) *Composition for computer musicians*, Boston: Course Technology.  
Holmes, T., (2015) *Electronic and experimental music: technology, music, and culture*. New York: Routledge.  
Hosken, D. (2014) *An introduction to music technology*. New York: Routledge.  
Moorefield, V. (2010) *The producer as composer: shaping the sounds of popular music*. Cambridge Mass.: MIT Press.  
Puckette, M. (2007) *The theory and technique of electronic music*. Hackensack N.J.: World Scientific Publishing Co.  
Rhind-Tutt, M. (2009) *Music technology from scratch*. London: Rhinegold Education.  
Margulies, J. (2013) *Ableton Live 9 Power*. Boston; Delmar Cengage Learning.  
Rumsey, F., (2004) *Desktop audio technology: digital audio and MIDI principles*. Oxford: Focal.  
Rumsey, F. (1994) *MIDI systems and control*. Oxford: Focal Press.  
White, P. (2002) *Recording and production techniques*, London: SMT.

Learners will be directed to appropriate journal literature and online material such as: Computer Music Journal; Electronic Musician; Future Music; Sound on Sound; The Mix; The Wire; Create Digital Music; emusician.

### 6.10.12 Specifications of Module Staffing Requirements

For each instance of the module, there will be one lecturer qualified to at least Bachelor of Arts (Honours) level in Music Technology or equivalent and with a relevant third level teaching qualification (e.g. Certificate in Training and Education). Depending on numbers a lab assistant may be required. Where this is the case the Assistant will be required to have a sound understanding of music technology and computer based workstations, either through industry experience or academic qualification. For example, a final year Bachelor of Music Production (Honours) learner may be suitable to assist the lecturer in lab sessions. Any lab assistant will work under the supervision of the lecturer.

### 6.10.13 Module Summative Assessment Strategy

The assessment is based on a combination of project work and in-class presentation of research.

Assessment Element	Percentage Weighting	Description	Module Outcomes
Assignment	30%	Creation of a multi-articulation Sampler Patch using key switching and neighbour borrowing. Learners are required to create a digital sample patch (library) of any instrument, by recording (sampling) individual notes/pitches of an instrument and creating a patch that can be used in any software sampler.	9.2
Assignment	40%	MIDI Composition using advanced MIDI editing and effects, synthesizers and Sampler patches. Learners will be required to compose a piece between 3-4 minutes in duration. The piece must contain elements of both synthesized sound and triggering of sampler patches. Recorded audio may also be used.	9.1 – 9.4
Presentation	30%	20 – 30-minute Group Presentation on a Virtual Instrument. Learners will be required to give a presentation, in class, on any virtual instrument they have researched. While this is a group presentation, individuals will present on separate elements of the instrument.	9.5

### 6.10.14 Sample Assessment Materials

#### Assessment 1: Create a Sampler Patch.

Each participant will be required to choose an instrument and create a virtual sampler patch of this instrument. To achieve this each will be required to record individual keys from the synth and store each one as a note/pitch in digital audio format. Each pitch will require a minimum of three velocities (low, medium, hard) to convey volume. Particular attention should be paid to file organization and labelling from the very beginning of the process. Participants will be required to record an appropriate amount of notes and utilise pitch processing techniques to produce un-sampled notes. Once completed, participants will submit a sampler patch to be loaded into Apple Logic's ESX24 sampler, and a folder containing all raw samples, correctly labelled.

#### Assessment 2: MIDI Song Programming

For this project, participants are required to create a piece of music from programmed virtual instruments. (roughly 3-4 minutes in duration). Each piece will contain programmed rhythmic elements (e.g. drums, percussion, bass.) and programmed melodic elements (keys, guitars, strings). Each piece should fit a desired genre (pop, RnB, E.D.M) chosen by the participant. Attention should also be paid to musical development throughout the piece. Participants will also be allowed to add non-MIDI material, e.g. Vocals to the piece. A stereo WAV file of the piece will be submitted along with the project file of the D.A.W. used by the participant. The final Wav file should be well mixed with respect to balance and tone.

## 6.11 Module 11: Applications Technology 2

<b>Module Title</b>	Applications Technology 2
<b>Module NFQ Level (only if an NFQ level can be demonstrated)</b>	7
<b>Module number/Reference</b>	BAAMT202
<b>Parent Programme</b>	BA Hons in Audio and Music Technology
<b>Stage of Parent Programme</b>	2
<b>Semester</b>	1 and 2
<b>Module Credit Units (FET/HET/ECTS)</b>	ECTS
<b>Module Credit number of Units</b>	10
<b>List the teaching and learning modes</b>	FT
<b>Entry requirements (statement of knowledge, skill and competence)</b>	Learner has earned Level 5 qualification. No previous applications technology ability is required.
<b>Pre-requisite module titles</b>	None
<b>Co-requisite module titles</b>	None
<b>Is this a capstone module? (Yes or No)</b>	No
<b>Staff qualifications (academic, pedagogical and professional/occupational) and experience required. (staff includes workplace personnel who are responsible for learners such as apprentices, trainees and learners in clinical placements)</b>	Staff are required to have at least a Bachelor of Arts (Honours) qualification in Music Technology or related discipline. Industry experience would be a benefit but is not a requirement. Staff are expected to have the Certificate in Training and Education qualification from Griffith College or its equivalent.
<b>Staff/learner ratio per centre (or instance of the module)</b>	For lecture load, ratio of 1:50 lecturer to learner is required and in lab sessions the maximum allowed is 1:25 The lecturer will also have 1 hour per week set aside in their timetable for 1:1 contact with learners who require it or have particular items they want to discuss.
<b>Maximum number of learners per centre (or instance of the module)</b>	50
<b>Duration of the Module</b>	Two Academic Semesters, 24 weeks teaching
<b>Average (over the duration of the module) of the contact hours per week.</b>	3
<b>Physical resources and support required per centre (or instance of the module)</b>	One lecture hall with capacity at least 50 and one computer lab with capacity of 25.

Analysis of Required Learning Effort									
Effort while in contact with staff									
Classroom and Demonstrations	Mentoring and small group tutoring	Other (Specify)		Directed e-learning (hours)	Independent learning (hours)	Other hours (specify)	Work-based learning hours of learning effort	Total Effort (hours)	
		Hours	Minimum ratio teacher/learner						Hours
48	1:50	24	1:25		178			250	
Allocation of marks (within the module)									
				Continuous Assessment	Supervised Project	Proctored practical	Proctored Written Examination	Total	
Percentage contribution							100%	100%	

### 6.11.1 Module Aims and Objectives

The objective of this module is to further develop the learner's proficiency using Digital Audio Workstations. Building upon the skills learnt in The Applications Technology, this module encourages the learner to develop workflows associated with music production and post-production environments. This module incorporates the Pro Tools 201, Pro Tools 210M and Logic 301 courses.

### **6.11.2 Minimum Intended Module Learning Outcomes**

On successful completion of this module the learner will be able to:

- MLO 11.1 Demonstrate effective music production workflows in DAWs.
- MLO 11.2 Examine and use comprehensive audio databases.
- MLO 11.3 Effectively manage system resources as per project requirements.
- MLO 11.4 Work effectively with Software instruments.
- MLO 11.5 Edit advanced audio using multiple display options.

### **6.11.3 Rationale for inclusion of the module in the programme and its contribution to the overall IPLOs**

Professional audio software are comprehensive packages that take time to fully comprehend and become useful with. This module develops the learning in Applications Technology, by introducing concepts and practices for larger and more creative workflows. The learning here contributes particularly to Programme learning Outcomes 3 and 6.

### **6.11.4 Information Provided to learners about the Module**

Learners enrolled on this module will receive a copy of the module descriptor and assessment briefs.

### **6.11.5 Module Content, Organisation and Structure**

The module is organised to deliver theory through lectures (2 hours) and supervised tutorials (1 hour). During tutorials, each learner will have a workstation allowing the lecturer to work individually with learners to demonstrate and explain the material.

The lectures each week will combine lecture delivery and discussion on the material.

Each lecturer has a time allocated for one-to-one meetings with learners as required. These are not mandatory sessions but available either where the lecturer wishes to discuss an element of the module with a learner, or a learner requests a meeting to discuss a particular topic. These sessions focus on academic issues only.

## Module Content

### Effective music production workflows in DAWs

- Advanced audio editing, movement and nudging of regions.
- The different metering options within a DAW.
- Creative use of automation.

### Audio databases

- The architecture of Digibase browsers and other database technologies.

### Management of system resources as per project requirements

- Professional I/O setups including Main paths, Sub paths, and audition outputs.

### Working with Software instruments

- The architecture of Logic Pro's series of software instruments.

## Editing using multiple display options 6.6.2

### 6.11.6 Module teaching and Learning Strategy

Classes are used to explain the concepts, and exemplify (in workshop style) a series of exercises. Developing a learner's ability in DAWs requires constant reinforcement and so sample recordings are worked through both as tutorials and by the learner outside of direct contact hours.

Activity	Teaching / Learning Strategy	Learning Environment
<b>Lectures (48 hours)</b>	Lectures / participative discussions / case studies and examples of DAW features / demonstrations of DAW features and techniques	College
<b>Tutorial (24 hours)</b>	Training in use of DAWs / practical work linking theory and practice / use of computer labs to practice skills	College / Mac lab
<b>Independent Work (178 hours)</b>	Directed and self-directed learning / home study / practicing skills using college studio spaces	College / Home
<b>Examination (3 hours)</b>	Evaluation of knowledge and related skills	College

### 6.11.7 Timetabling, Learner Effort and Credit

The module is timetabled as one 3-hour session to the whole class. This will consist of the 2-hour lecture, and a 1-hour tutorial with Digital Audio Workstations. On the workstations, the learners engage directly with software used within Professional Audio environments.

The number of credits assigned to this module is our assessment of the learner effort required. It is our view that 10 ECTS of learner effort is required by learners coming new to the material to achieve the learning outcomes required.

### 6.11.8 Work-Based Learning and Practice Placement.

There is no work based learning or practical placement in the module.

### 6.11.9 E-Learning

The College VLE is used to disseminate notes, advice and online resources to support the learners. The learners are also given access to Lynda.com as a resource for reference.

### 6.11.10 Module Physical Resource Requirements

Requirements are for a fully equipped lecture hall and access for learners to a computer workstation with industry standard software. Access to hardware such as MIDI keyboards and i-Loks is also required.

### 6.11.11 Reading Lists and other information resources.

#### Recommended Reading

- Cook, F. (2015) *Pro Tools 201: Pro Tools Production I* Avid.com  
Cook, F. (2015) *Pro Tools 210M: Pro Tools production II (Music Production)* Avid.com  
Dvorin, D. (2015) *Logic Pro X Advanced Audio Production: Composing and Producing Professional Audio* Peachpit Press

#### Secondary Reading

- Lee White, B. (2014) *Pro Tools Mixing and Mastering* Lynda.com  
Malouf, B. (2016) *Mixing Techniques for Pop Music, Part 1* Lynda.com  
Malouf, B. (2016) *Mixing Techniques for Pop Music, Part 2* Lynda.com  
Lewin, S. (2014) *Mixing and Mastering with Logic Pro X* Lynda.com  
Bustelo, D. (2013) *New Ways to Create Music with logic Pro X* Lynda.com

### 6.11.12 Specifications of Module Staffing Requirements

For each instance of the module, there will be one lecturer qualified to at least Bachelor of Arts (Honours) level in Music Technology or equivalent and with a relevant third level teaching qualification (e.g. Certificate in Training and Education). Depending on numbers a lab assistant may be required. Where this is the case the Assistant will be required to have a sound understanding of digital audio workstations, either through industry experience or academic qualification. For example, a final year Bachelor of Music Production (Honours) learner may be suitable to assist the lecturer in lab sessions. Any lab assistant will work under the supervision of the lecturer.



### 6.11.13 Module Summative Assessment Strategy

Name	Description	Weighting	Learning Outcomes
Logic 301	In class assessment on Logic Pro. 50 multiple choice questions.	30%	10.1 – 10.5
Pro Tools 201	In class assessment on Pro Tools production. 50 multiple choice questions.	30%	10.3, 10.4
Pro Tools 210M	In class assessment on Pro Tools Production. 50 multiple choice questions.	40%	10.1 – 10.5

These assessments focus on theory and practical application of the various software packages.

Learners may choose to complete Pro Tools and Logic industry online exams at any time during their programme.

### 6.11.14 Sample Assessment Material

1-Hour, 50 Multiple choice questions:

ProTools HD systems

Sample Question 1:

1. Which one of the following is NOT a way to deactivate a track?
  - a. Right-Click on the track name and choose **Make Inactive**.
  - b. Select the track and choose Track > Make Inactive from the main menu
  - c. Alt-Click on the track name in the Tracks Show/Hide List
  - d. Command +Control – Click (Mac) or Ctrl+Start-Click on the track type icon in the Mix window.

Answer: \_\_\_\_\_

2. Which Grabber Tool mode allows you to select non-contiguous clips on one or more tracks?
  - a. Time Grabber.
  - b. Separation grabber
  - c. Object Grabber
  - d. All of the above.

Answer: \_\_\_\_\_

## 6.12 Module 12: Music for Producers 2

<b>Module Title</b>	Music for Producers 2
<b>Module NFQ Level (only if an NFQ level can be demonstrated)</b>	7
<b>Module number/Reference</b>	BAAMT203
<b>Parent Programme</b>	BA (Hons) in Audio and Music Technology
<b>Stage of Parent Programme</b>	2
<b>Semester</b>	1 and 2
<b>Module Credit Units (FET/HET/ECTS)</b>	ECTS
<b>Module Credit number of Units</b>	10
<b>List the teaching and learning modes</b>	FT
<b>Entry requirements (statement of knowledge, skill and competence)</b>	Learner has earned Level 5 qualification. No previous applications technology ability is required.
<b>Pre-requisite module titles</b>	None
<b>Co-requisite module titles</b>	None
<b>Is this a capstone module? (Yes or No)</b>	No
<b>Staff qualifications (academic, pedagogical and professional/occupational) and experience required. (staff includes workplace personnel who are responsible for learners such as apprentices, trainees and learners in clinical placements)</b>	Staff are required to have at least a Bachelor of Arts (Honours) qualification in Music Technology or related discipline. Industry experience would be a benefit but is not a requirement. Staff are expected to have the Certificate in Training and Education qualification from Griffith College or its equivalent.
<b>Staff/learner ratio per centre (or instance of the module)</b>	For lecture load, ratio of 1:50 lecturer to learner is required and in lab sessions the maximum allowed is 1:25 The lecturer will also have 1 hour per week set aside in their timetable for 1:1 contact with learners who require it or have particular items they want to discuss.
<b>Maximum number of learners per centre (or instance of the module)</b>	50
<b>Duration of the Module</b>	Two Academic Semester, 24 weeks teaching
<b>Average (over the duration of the module) of the contact hours per week.</b>	3
<b>Physical resources and support required per centre (or instance of the module)</b>	One lecture hall with capacity at least 50 and one computer lab with capacity of 25.

Analysis of Required Learning Effort								
Effort while in contact with staff								
Classroom and Demonstrations	Mentoring and small group tutoring	Other (Specify)		Directed e-learning (hours)	Independent learning (hours)	Other hours (specify)	Work-based learning hours of learning effort	Total Effort (hours)
		Hours	Minimum ratio teacher/learner					
48	1:50	24	1:25		178			250
Allocation of marks (within the module)								
				Continuous Assessment	Supervised Project(s)	Proctored practical	Proctored Written Examination	Total
Percentage contribution					60%		40%	100%

### 6.12.1 Module Objectives

This module aims to further develop the learner's foundational knowledge of musical theory aural training skills. Musical forms in popular and contemporary music genres require analysis. Notational and theoretical skills are applied through technology, utilising both graphic to standard notation. Learners are equipped with the vocabulary to convey musical ideas to instrumentalists.

### **6.12.2 Minimum Intended Module Learning Outcomes**

On successful completion of this module the learner will be able to:

- MLO 12.1 Apply the concepts of music theory and its elements of notation, form, rhythm, harmony and melody in a variety of music genres.
- MLO 12.2 Learners will develop transcribing and aural analysis skills.
- MLO 12.3 Evidence the principles of modern arranging and orchestration and employ its practical applications in music technology and studio environments.
- MLO 12.4 Develop advanced musical ideas using current music technologies.

### **6.12.3 Rationale for inclusion of the module in the programme and its contribution to the overall IPLOs**

To become a successful audio professional, confidence and versatility are vital. This module will develop the skills taught in Music for Producers 1. Learners will be taught the skills required to be able to handle larger projects involving multiple instrumentalists. The module addresses Programme Learning Outcomes 1 and 2 while also underpinning knowledge and skills for Outcomes 4 and 5.

### **6.12.4 Information Provided to Learners about the Module**

Learners enrolled on this module will receive a copy of the module descriptor and assignment briefs, including an outline of the criteria for assessment.

Previous examples of assignments are also presented to the class.

### **6.12.5 Module Content, Organisation, and Structure**

The module is organised to deliver theory through lectures (2 hours) and supervised tutorials (1 hours). During tutorials, each learner will have a workstation allowing the lecturer to work individually with learners to demonstrate and explain the material.

The lectures each week will combine lecture delivery and discussion on the material.

Each lecturer has a time allocated for one-to-one meetings with learners as required. These are not mandatory sessions but available either where the lecturer wishes to discuss an element of the module with a learner, or a learner requests a meeting to discuss a particular topic. These sessions focus on academic issues only.

## **Module Content**

### **Aural Training Skills Music for music production/ audio engineering learners**

- Reading music and scores
- Aural Training
- Pitch and Tuning
- Intervals
- Scales
- Rhythmic and Melodic analysis and recognition
- Vocal and Instrumental Skills
- Timbre analysis
- Sound and Style Analysis in Popular Music

### **Introduction to Rhythm Studies throughout different Musical Styles**

- Classical, Contemporary Music
- World Music
- Popular Music, Jazz, Latin Music
- Rhythmic Style demonstrations by visiting instrumentalists

### **Theory**

- Working Knowledge of Musical Notation
- Chords (Triads, inversions and extended voicings)
- Scales and Modes
- Harmony and Texture

### **Arrangement and Orchestration**

- Orchestration and Instrumentation
- Song Construction
- Improvisation within the studio environment

## **6.12.6 Module Teaching and Learning Strategy**

The module is delivered through a combination of lectures, tutorials and practical lab computer sessions. Tutorials will enable learners to practice analysis of musical styles and genres while also serving to further develop their aural skillset. Lab sessions will allow learners to practice transcription skills and engage with music technology software.

Activity	Teaching / Learning Strategy	Learning Environment
<b>Lectures (48 hours)</b>	Lectures / participative discussions / demonstrations of musical structures and forms using notation and representation / use of audio examples	College
<b>Tutorial (24 hours)</b>	In-depth focus on music theory elements / music theory exercises and demonstrations using audio material / practicing skills	College / Mac lab
<b>Assignment (96 hours)</b>	Practice learning and perfecting advanced music for producers skills	College
<b>Independent Work (82 hours)</b>	Directed and self-directed learning / home study	College / Home
<b>Examination (3 hours)</b>	Evaluation of knowledge and related skills	College

### 6.12.7 Timetabling, Learner Effort and Credit

The module is timetabled as one 3-hour session to the whole class. This will consist of the 2-hour lecture, and a 1-hour lab tutorial. In the labs, the learners engage directly with music notation and editing software, while also being able to listen to material required for aural training.

The number of credits assigned to this module is our assessment of the learner effort required. It is our view that 10 ECTS of learner effort is required by learners coming new to the material to achieve the learning outcomes required.

### 6.12.8 Work-based Learning and Practice-placement

There is no work based learning or practical placement involved in the module.

### 6.12.9 E-Learning

The College VLE is used to disseminate notes, advice and online resources to support the learners. The learners are also given access to Lynda.com as a resource for reference.

### 6.12.10 Module Physical Resource Requirements

Requirements are for a fully equipped lecture hall and access for each group to 3 hour sessions in a computer lab. Software required for this module is a standard score editor / sequencer and music playback device. The lecturers station should be equipped with a fully weighted MIDI keyboard.

### 6.12.11 Reading lists and other learning materials

#### Recommended Reading

Delamont, G. (1990) *Modern harmonic technique: The elements of harmony: 001*. Delevan; New York: Kendor Music.

Rooksby, R. (2007) *Arranging songs: how to put the parts together*. New York NY: Backbeat Books.

Taylor, E. (1989) *The AB guide to music theory [2 Vol.s]*. London: Associated Board of the Royal Schools of Music.

Schmunk, R. (2016) *Learning Music Notation* Lynda.com

Velard, J. (2015) *Music Theory for Songwriters: The Fundamentals* Lynda.com

#### Secondary Reading

Adler, S. (2002) *The study of orchestration.*, London: W. W. Norton & Company.

Cole, B. (1996) *The composer's handbook*. London: Schott Educational.

Cole, B. (2006) *The pop composer's handbook: a step by step guide to the composition of melody, harmony, rhythm and structure*. London: Schott.

Hewitt, M. (2009) *Composition for computer musicians*. Boston: Course Technology.

Rumsey, F. (2004) *Desktop audio technology: digital audio and MIDI principles*. Oxford: Focal

### 6.12.12 Specifications of Module Staffing Requirements

For each instance of the module, there will be one lecturer qualified to at least Bachelor of Arts (Honours) level in Music or equivalent, and with a relevant third level teaching qualification (e.g. Certificate in Training and Education). Depending on numbers a lab assistant may be required. Where this is the case the Assistant will be required to have a sound understanding of music theory, either through industry experience or academic qualification. For example, a final year Bachelor of Music Production (Honours) learner may be suitable to assist the lecturer in lab sessions. Any lab assistant will work under the supervision of the lecturer.

### 6.12.13 Module Summative Assessment Strategy

The assessment is based on a combination of written assignment, aural examination and written examination.

Name	Description	Weighting	Learning Outcomes
Assignment 1	For this assignment, learners will take an in-class assessment testing their ability to recognise chords and chord inversions, intervals, time signatures, melodic and rhythmic dictation.	30%	11.3
Assessment 2	Learners will take an in-class assessment testing their ability to recognise more advanced chords (chord inversions), scales, melodic and rhythmic dictations.	30%	11.2
Examination	Written and Aural examination process to evidence a developing musical ear and theoretical understanding.	40%	11.1, 11.4

### 6.12.14 Sample Assessment Methods

Assignment 1 brief: Aural skills test:

- Melodic transcription: simple melodies will be given (played on piano) in two different pitch registers
- Intervals recognition: simple and compound intervals (played on piano)
- Scales, modes and Pentatonic scales recognition: scales and modes will be played on piano
- Rhythm transcription: the 4 to 8 bar rhythm will be clapped (simple or Compound time)
- Chords recognition: (Triads root position and inversions) chords will be played on piano

Assignment 2 Brief: Aural skills test 2

- Melodic transcription (including rhythm): the 8 bar melodies will be given (played on piano) different pitch registers
- Scales, modes, chromatic, whole tone and pentatonic scales recognition: scales and modes played on piano.
- Rhythm transcription: the 8 bar rhythm samples will be clapped (simple or compound time)
- Chords recognition (triads – major, minor augmented / root position and inversion, played on piano)



## 6.13 Module 13: Recording and Mixing 1

<b>Module Title</b>	Recording and Mixing 1
<b>Module NFQ Level (only if an NFQ level can be demonstrated)</b>	7
<b>Module number/Reference</b>	BAAMT204
<b>Parent Programme</b>	BA (Hons) Audio and Music Technology
<b>Stage of Parent Programme</b>	2
<b>Semester</b>	1 and 2
<b>Module Credit Units (FET/HET/ECTS)</b>	ECTS
<b>Module Credit number of Units</b>	10
<b>List the teaching and learning modes</b>	FT
<b>Entry requirements (statement of knowledge, skill and competence)</b>	Learner has earned Level 5 qualification. No previous applications technology ability is required.
<b>Pre-requisite module titles</b>	None
<b>Co-requisite module titles</b>	None
<b>Is this a capstone module? (Yes or No)</b>	No
<b>Staff qualifications (academic, pedagogical and professional/occupational) and experience required. (staff includes workplace personnel who are responsible for learners such as apprentices, trainees and learners in clinical placements)</b>	Staff are required to have at least a Bachelor of Arts (Honours) qualification in Music Technology or related discipline. Industry experience would be a benefit but is not a requirement. Staff are expected to have the Certificate in Training and Education qualification from Griffith College or its equivalent.
<b>Staff/learner ratio per centre (or instance of the module)</b>	For lecture load, ratio of 1:50 lecturer to learner is required and in lab sessions the maximum allowed is 1:25 The lecturer will also have 1 hour per week set aside in their timetable for 1:1 contact with learners who require it or have particular items they want to discuss.
<b>Maximum number of learners per centre (or instance of the module)</b>	50
<b>Duration of the Module</b>	Two Academic Semesters, 24 weeks teaching
<b>Average (over the duration of the module) of the contact hours per week.</b>	3
<b>Physical resources and support required per centre (or instance of the module)</b>	One lecture hall with capacity at least 50 and one computer lab with capacity of 25.

Analysis of Required Learning Effort									
Effort while in contact with staff									
Classroom and Demonstrations	Mentoring and small group tutoring	Other (Specify)		Directed e-learning (hours)	Independent learning (hours)	Other hours (specify)	Work-based learning hours of learning effort	Total Effort (hours)	
		Hours	Minimum ratio teacher/learner						Hours
48	1:50	24	1:25		178			250	
Allocation of marks (within the module)									
				Continuous Assessment	Supervised Project(s)	Proctored practical	Proctored Written Examination	Total	
Percentage contribution				20%	70%	10%		100%	

### 6.13.1 Module Objectives

This module develops the learner's ability to work in a professional recording environment. Learners become competent using large format analog recording consoles in a variety of recording scenarios. Learners expand on the full range of skills required and use best practice to allow for cross platform compatibility.

### 6.13.2 Minimum Intended Module Learning Outcomes

On successful completion of this module the learner will be able to:

- MLO 13.1 Demonstrate effective use of a large format console in a professional environment.
- MLO 13.2 Evidence an in-depth knowledge of multitrack and stereo recording techniques.
- MLO 13.3 Apply mixing techniques and signal processing.
- MLO 13.4 Examine variable room acoustics.
- MLO 13.5 Apply correct practice for multi-studio workflows in relation to compatibility and interchangeability.

### 6.13.3 Rationale for inclusion of the module in the programme and its contribution to the overall IPLOs

This module focusses on the learner's skillset for recording and mixing audio. Learners will become proficient in a large studio environment, managing multiple signals and overseeing the entire recording process. This skill will enable learners to approach recordings confidently and so that they are always thinking of the final product. All decisions made, should always consider, and be geared towards producing a high-quality end product, from the recording stage, through editing and into final the final mix. This will assist in the attainment of Programme Learning Outcomes 3 and 6, while also contributing to outcomes 10 and 11.

### 6.13.4 Information Provided to Learners about the Module

Learners enrolled on this module will receive a copy of the module descriptor and assignment briefs, including an outline of the criteria for assessment.

Previous examples of assignments are also presented to the class.

### 6.13.5 Module Content, Organisation and Structure

The module is organised to deliver theory through lectures (2 Hours) and supervised tutorials (1 Hour). During tutorials, each learner will have a workstation allowing the lecturer to work individually with learners to demonstrate and explain the material. Some tutorials will take place in a recording studio with large format consoles and variable room acoustics.

The lectures each week will combine lecture delivery and discussion on the material.

Each lecturer has a time allocated for one-to-one meetings with learners as required. These are not mandatory sessions but available either where the lecturer wishes to discuss an element of the module with a learner, or a learner requests a meeting to discuss a particular topic. These sessions focus on academic issues only.

## **Module Content**

### **Large format consoles in a professional environment**

- Competent operation of console.
- Correct gain structure & routing.
- Patching of external signal processors and effects.
- Speed of operation.
- Communication with client.
- Good trouble shooting procedures.

### **Multi-track and stereo recording techniques**

- Correct microphone choice & positioning.
- Instrument positioning within studio.
- Performance notes.
- Editing techniques & corrective practices.

### **Mixing techniques & signal processing**

- Aural quality of final product with respect to balance and tone.
- Creative use of signal processing.
- Good use of corrective technologies for timing and pitch.

### **Variable room acoustics**

- Good interpretation of recording brief.
- An understanding of acoustical range of studio.
- Control of spill and instrument isolation.

### **Correct practice for multi-studio workflows in relation to compatibility / interchangeability**

- Correct 'Save' commands.
- Cross platform compatibility.
- Backwards compatible session files.

## **6.13.6 Module Teaching and Learning Strategy**

Learners are taught using a combination of lectures and practical tutorials.

Tutorials are will take place in recording studios and practical labs and are used to develop the learner's proficiency in recording techniques, editing and mixing.

In addition, learners will need to put in work outside of lectures and tutorials.

Activity	Teaching / Learning Strategy	Learning Environment
<b>Lectures (48 hours)</b>	Lectures / demonstration of music technology equipment and theory / analysis of recording techniques and historical works / flipped classroom discussion and engagement	College
<b>Tutorial (24 hours)</b>	Learning and practice of music technology techniques / training in large recording sessions on an analog console / use of college resources to practice techniques	College / Mac lab
<b>Assignment (96 hours)</b>	Practice learning and perfecting advanced music technology skills	College
<b>Independent Work (82 hours)</b>	Directed and self-directed learning / home study / use of college studio spaces	College / Home

### 6.13.7 Timetabling, Learner Effort and Credit

The module is timetabled as one 3-hour session to the whole class. This will consist of the 2-hour lecture, and a 1-hour studio tutorial.

The number of credits assigned to this module is our assessment of the learner effort required. It is our view that 10 ECTS of learner effort is required by learners coming new to the material to achieve the learning outcomes required.

### 6.13.8 Work-based Learning and Practice-placement

There is no work based learning or practical placement involved in the module.

### 6.13.9 E-Learning

The College VLE is used to disseminate notes, advice and online resources to support the learners. The learners are also given access to Lynda.com as a resource for reference.

### 6.13.10 Module Physical Resource Requirements

Requirements are for a fully equipped lecture hall and access to one or more recording studios. In the recording studios, there should be an analog mixing console with patchbay. The studio should be equipped with variable room acoustics.

### 6.13.11 Reading Lists and Other Learning Materials

#### Recommended Reading

Huber, D. (2013) *Modern recording techniques*. Oxford: Focal Press.

Izhaki, R., (2011) *Mixing audio: concepts, practices and tools*. Oxford; Focal Press.

Katz, B. (2014) *Mastering audio: the art and the science*. Oxford: Focal Press.

Rayburn, R. (2011) *Eargle's The Microphone Book: From Mono to Stereo to Surround - A Guide to Microphone Design and Application*. Oxford: Focal Press

Rumsey, F. & McCormick, T. (2005) *Sound and recording: An Introduction*. Oxford: Focal Press.

### Secondary Reading

- Ballou, G. (2015) *Handbook for sound engineers*. Oxford: Focal Press.
- Blauert, J. (1996) *Spatial hearing: the psychophysics of human sound localization*. Boston Mass: MIT Press.
- Everest, F.A. & Pohlmann, K.C. (2015) *Master handbook of acoustics*. New York: Mc Graw-Hill.
- Owsinski, B. (2013) *The Mixing engineer's handbook*. Boston MA: Cengage Learning
- Stavrou, M. (2003) *Mixing with your mind*. Mosmon NSW: Flux Research.
- Hewitt, R. (2015) *Drum Recording Session with Josh Freese* Lynda.com
- Hirsch, S. (2016) *Vocal Production techniques: Editing and Mixing in Pro Tools* Lynda.com
- Darlington, D. (2014) *Mixing techniques with Waves Plugins* Lynda.com

### 6.13.12 Specifications of Module Staffing Requirements

For each instance of the module, there will be one lecturer qualified to at least Bachelor of Arts (Honours) level in Sound Engineering or equivalent, and with a relevant third level teaching qualification (e.g. Certificate in Training and Education). Depending on numbers a lab assistant may be required. Where this is the case the Assistant will be required to have a sound understanding of music technology and computer based workstations, either through industry experience or academic qualification. For example, a final year Bachelor of Music Production (Honours) learner may be suitable to assist the lecturer in lab sessions. Any lab assistant will work under the supervision of the lecturer.

### 6.13.13 Module Assessment Strategy

Name	Description	Weighting	Learning Outcomes
Studio Practical Exam	Learners will undergo a 20-minute examination of studio signal flow and mixing console operation. This will examine learners ability to: setup studio for recording, route signals through the mixing console, use foldback mixes, use fx mixes, create a stereo recording through the console.	10%	12.1
Assignment 1: Multi-track recording	Learners are required to make a multi-track recording consisting of at least 24 tracks of recorded audio between 3-4 minutes in duration. Learners must use mono and stereo recording techniques.	30%	12.1 – 12.5
Assignment 2: Continuous assessment	Using the recording from assignment 1, learners will be required to attend formative assessment meetings to monitor progression of the recording through editing stages (editing between takes, timing and pitch corrections), signal processing and mixing.	20%	12.3, 12.5
Assignment 3: Mix	Using the recording from Assignment 1, Learners are required to submit a final mix of the piece. Expected processes learners would use include but are not limited to, compression, equalisation, limiting, gating, de-essing, reverb, delay, etc. Attention should also be paid to sonic clarity, stereo imaging, balance and tone of final mix.	40%	12.3, 12.5

### 6.13.14 Sample Assessment Materials

#### Assessment 1

##### Studio Practical Exam (20 Minutes)

For this examination, your tutor will be your 'Client', and should be treated as such.

You will be required to perform the following tasks, within the allotted time.

- 1: Studio Setup: You should set the mixing console and recording software ready to make a new recording. Be sure to pay attention to all areas of the console and make sure your signal path is ready.
- 2: Signal Routing:
  - The signal should be routed from gain stage through the computer to the stereo master fader.
  - Setup a fold back mix for the client. (Talkback will also be required here.)
  - Process the signal through the mixing console and/or the studio outboard equipment. (Tutor will decide)
  - Apply a minimum of two time based effects to the signal, using the mixing console and patch bay. (You may use computer based effects units)

3: Stereo Mix-down: Record the master mix with all processing and effects to a stereo track on the computer.

You will be assessed on:

- Ability to complete each of the tasks set out above
- Ability to identify problems and rectify them.
- Communications skills
- Time keeping – completing the task within the time frame.

**You will also be expected to employ appropriate trouble shooting techniques to eliminate any problems during the process.**

(20-minute timeframe)

## **Assessment 2**

### **Multi-track Recording**

Working independently, you will undertake a recording project to include no less than 24 tracks of recorded audio. The recording should be 3-4 minutes in duration. **The form of which must be negotiated with your tutor.**

The recording should be made in a suitable environment paying attention to microphone choice and placement. Sound separation will be an important consideration in a multiple instrument recording. You will be expected to use both mono and stereo recording techniques. All recording must be done to a metronome click.

Once complete, you will submit:

- a. DAW session file of the recording
- b. stereo wav file monitor mix of the piece (16 bit, 44.1KHz WAV format.)
- c. Documentation.

This recording will be used for assignment 2 and 3 in semester 2.

## **Assessment 3**

### **Continuous Assessment**

As you progress through the mix of the song you will be required to attend scheduled meetings with your tutor and peers. During these meetings, you must articulate clear ideas and working methodologies applicable to your mix.

## **Assessment 4:**

### **Mixing**

Using the same piece of music from assessment 2 and 3 above, you will produce a final mix of the song. You must use creative signal processing to enhance individual sounds/instruments. Expected processes would include compression, equalisations, limiting, gating, de-essing, reverb, delay, etc. Each process employed should be carefully considered and have a demonstrable effect on the piece. Particular attention should be paid to the use of appropriate panning for effective stereo imaging.

Each participant will submit:

- a. DAW session file of the final mix
- b. stereo wav file of final mix (16 bit, 44.1KHz WAV format.)
- c. Documentation



## 6.14 Module 14: Live Music & Performance Technology 2

<b>Module Title</b>	Live Music and Performance Technology 2
<b>Module NFQ Level (only if an NFQ level can be demonstrated)</b>	7
BAAMT201	BAAMT205
<b>Parent Programme</b>	BA (Hons) in Audio and Music Technology
<b>Stage of Parent Programme</b>	2
<b>Semester</b>	2
<b>Module Credit Units (FET/HET/ECTS)</b>	ECTS
<b>Module Credit number of Units</b>	5
<b>List the teaching and learning modes</b>	FT
<b>Entry requirements (statement of knowledge, skill and competence)</b>	Learner has earned Level 5 qualification. No previous experience is required
<b>Pre-requisite module titles</b>	None
<b>Co-requisite module titles</b>	None
<b>Is this a capstone module? (Yes or No)</b>	No
<b>Staff qualifications (academic, pedagogical and professional/occupational) and experience required. (staff includes workplace personnel who are responsible for learners such as apprentices, trainees and learners in clinical placements)</b>	Staff are required to have at least a Bachelor of Arts (Honours) qualification in Music Technology or related discipline. Industry experience would be a benefit but is not a requirement. Staff are expected to have the Certificate in Training and Education qualification from Griffith College or its equivalent.
<b>Staff/learner ratio per centre (or instance of the module)</b>	For lecture load, ratio of 1:50 lecturer to learner is required and in lab sessions the maximum allowed is 1:25 The lecturer will also have 1 hour per week set aside in their timetable for 1:1 contact with learners who require it or have particular items they want to discuss.
<b>Maximum number of learners per centre (or instance of the module)</b>	50
<b>Duration of the Module</b>	One Academic Semester, 12 weeks teaching
<b>Average (over the duration of the module) of the contact hours per week.</b>	3
<b>Physical resources and support required per centre (or instance of the module)</b>	One lecture hall with capacity at least 50 and one computer lab with capacity of 25.

Analysis of Required Learning Effort										
Effort while in contact with staff										
Classroom and Demonstrations	Mentoring and small group tutoring		Other (Specify)		Directed e-learning (hours)	Independent learning (hours)	Other hours (specify)	Work-based learning hours of learning effort	Total Effort (hours)	
	Hours	Minimum ratio teacher/learner	Hours	Minimum ratio teacher/learner						
24	1:50	12	1:25			89			125	
Allocation of marks (within the module)										
					Continuous Assessment	Supervised Project(s)	Proctored practical	Proctored Written Examination	Total	
Percentage contribution						50%	50%		100%	

#### 6.14.1 Module Aims and Objectives

This module follows from Live Performance Technologies 1. Learners gain insight into a variety of standard workflows surrounding live performances. As well as audio and visual technologies, learners are taught the basics of instrument technology.

Drum, keyboard and guitar technicians will teach learners the correct planning, preparation and setup of instruments for the stage. DJ and VJ technologies will also be introduced at this stage.

### **6.14.2 Minimum Intended Module Learning Outcomes**

On successful completion of this module the learner will be able to:

- MLO 14.1 Demonstrate a knowledge of DJ & VJ technologies.
- MLO 14.2 Setup the backline for live music and performance.
- MLO 14.3 Work as a key member of production team in diverse contexts including concert performance, interactive installation and theatre.
- MLO 14.4 Examine lighting technologies and synchronization.
- MLO 14.5 Use visual performance technologies effectively for live performance.

### **6.14.3 Rationale for inclusion of the module in the programme and its contribution to the overall IPLOs**

Emerging technologies are more accessible and portable. Knowing how to work with these technologies is a big advantage for any professional looking to succeed, whether it's in the studio, or in the world of live performance. Digital control by the performer of more than just a single instrument is commonplace, particularly in the world of EDM. Using controllers to trigger sound and also bespoke visuals can now be done live on stage allowing for a more interactive audio visual experience. The learning outcomes in this module contribute to the learner's attainment of Programme Learning Outcome 1, 7 and 8.

### **6.14.4 Information Provided to Learners about the Module**

Learners enrolled on this module will receive a copy of the module descriptor and assignment briefs, including an outline of the criteria for assessment.

Previous examples of assignments are also presented to the class.

### **6.14.5 Module Content, Organisation and Structure**

The module is organised to deliver theory through lectures (2 hours) and supervised tutorials (1 hours). During tutorials, each learner will have a workstation allowing the lecturer to work individually with learners to demonstrate and explain the material. Some tutorials will take place in a larger room with P.A. and lighting equipment allowing learners to engage directly in a performance scenario.

The lectures each week will combine lecture delivery and discussion on the material.

Each lecturer has a time allocated for one-to-one meetings with learners as required. These are not mandatory sessions but available either where the lecturer wishes to discuss an element of the module with a learner, or a learner requests a meeting to discuss a particular topic. These sessions focus on academic issues only.

## Module Content

### Visual performance technologies

- Competent use of audio-visual performance software.

### Lighting technologies and synchronization

- The mechanics of stage lighting and the principles of lighting design.

### Working as a key member of a production team

- Knowledge of the roles and workflows of modern concert and theatre productions.
- Working in diverse contexts including concert performance, interactive installation and theatre.

### Backline setup

- Timely and effective set –up of components of backline; drums, guitars or keyboard rigs.

### DJ & VJ technologies

- Competence in the use of DJ & VJ software and controllers.

## 6.14.6 Module Teaching and Learning Strategy

This module is delivered using a combination of lectures, tutorials and practical sessions in a performance environment. The emphasis is on developing performance skills between music technology software and hardware during a live show. These skills need to be applied in a systematic way, so learners will be encouraged to work in a performance setting as often as possible.

Activity	Teaching / Learning Strategy	Learning Environment
<b>Lecture (24 hours)</b>	Lectures / participative discussions / case studies of live sound environments and set ups	College
<b>Tutorial (12 hours)</b>	Practicing set up and operation of live sound equipment / training in various live sound set ups and situations / use of live performance equipment / use of synchronization and controller systems	College / Studio
<b>Assignment (48 hours)</b>	Practice learning and perfecting live music and performance technology skills	College
<b>Independent Work (41 hours)</b>	Directed and self-directed learning / home study	College / Home

## 6.14.7 Timetabling, Learner Effort and Credit

The module is timetabled as one 3-hour session to the whole class. This will consist of the 2-hour lecture, and a 1-hour tutorial. In the labs, the learners engage directly with music technology and performance software and controllers, allowing development of the skills required to programme audio/visual material.

The number of credits assigned to this module is our assessment of the amount of learner effort required. It is our view that 5 ECTS of learner effort is required by learners coming new to the material to achieve the learning outcomes required.

#### **6.14.8 Work-based Learning and Practice-placement.**

There is no work based learning or practical placement involved in the module.

#### **6.14.9 E-Learning**

The College VLE is used to disseminate notes, advice and online resources to support the learners. The learners are also given access to Lynda.com as a resource for reference.

#### **6.14.10 Module Physical Resource Requirements**

Requirements are for a fully equipped lecture hall and access for learners to 3 hour sessions in a computer lab. Software required for this module is music tech software and performance controller. A standard DAW and visual programming software. Performance controllers will be required with a performance area for tutorials and student independent learning.

#### **6.14.11 Reading lists and other Information Resources.**

##### **Recommended Reading**

Butler, M.J. (2014) *Playing with something that runs technology, improvisation, and composition in DJ and laptop performance*. Oxford: OUP.

Hopgood, J. (2013) *QLab 3 Show Control: projects for live performances & installations*. Oxford: Focal Press.

Schiller, B. (2016) *The Automated Lighting Programmer's Handbook* Focal Press

Keller, M. & Weiss, J. (2010) *Light fantastic: the art and design of stage lighting*. New York: Prestel.

Amundson, M. (2007) *Live sound: theory and practice*, Las Vegas: Timeless Communications.

Huntington, J. (2013) *Control systems for live entertainment*, Oxford: Focal Press.

Margulies, J. (2013) *Ableton Live 9 power*. Delmar Cengage

Van Beek, M. (2004) *Electrical safety for live events*. Cambridge: Entertainment Technology Press.

##### **Secondary Reading**

Jenkins, Mark. (2012). *iPad Music: In the studio and on stage*, Focal Press.

Song, J. (Ed.) (2013) *Stage Design: Concerts, Events, Ceremonies and Theater*. Gingko Press

Higgs, C. (2002) *An Introduction to Rigging in the Entertainment Industry*, Entertainment Technology Press Ltd

Scott Giaquinta, J. (2015) *Djing with Ableton Live* Lynda.com

Minsteris, D. (2014) *Performing with Ableton Live: On Stage with St. Vincent*. Lynda.com

Childs, G.W. (2009) *Reason and Record for Live Performance* Lynda.com

### 6.14.12 Specifications for Module Staffing Requirements

For each instance of the module, there will be one lecturer qualified to at least Bachelor of Arts (Honours) level in Music Technology or equivalent and with a relevant third level teaching qualification (e.g. Certificate in Training and Education). Depending on numbers a lab assistant may be required. Where this is the case the Assistant will be required to have a sound understanding of object oriented programming, either through industry experience or academic qualification. For example, a final year Bachelor of Music Production (Honours) learner may be suitable to assist the lecturer in lab sessions. Any lab assistant will work under the supervision of the lecturer and to agreed worksheets.

### 6.14.13 Module Summative Assessment Strategy

The assessment is based on practical demonstrations and group performance

Element No	Weighting	Type	Description	Learning Outcomes Assessed
1	20%	Assignment	Learners are required to create a lighting plan/performance to accompany a piece of music. The plan will be executed as an in-class performance, requiring learners to setup and connect software and hardware for the performance.	13.1 – 13.3
2	30%	Assignment	Learners are required to create a bespoke visual plan/performance to accompany a piece of music. The plan will be performed in class, requiring learners to setup and connect software and hardware for the performance.	13.1, 13.3, 13.5
3	50%	Group Practical	In groups, learners will plan and realise a musical performance with accompanying lighting and visuals. This will be performed as an in-class assessment. The musical element will contain both DJ performance and live performance control of musical instrument software.	13.1 – 13.5

### 6.14.14 Sample Assessment Materials

#### Sample Assignment 1:

For this assignment, you are required develop a bespoke lighting plan and stage setup for a piece of music. The music must be negotiated with your tutor.

The music can be no longer than 4 minutes in duration. You will then perform/execute the piece as an in-class assessment. The lighting plan should reflect the tone/mood of the music. You may use either hardware or software controllers for the performance.

You are not limited to just college equipment; you may bring in other lights/props for the performance.

Once complete, you will submit a technical log (Microsoft Word Document) documenting the working processes employed, a critical reflection on the processes and an evaluation and critique of the completed work.

### **Sample Assignment 2:**

For this assignment, you are required develop a bespoke visual accompaniment to a piece of music. The music must be negotiated with your tutor. You may use programming software (e.g. Q-Lab) to create/programme the visuals. The visual element should contain at least one element of each of the following:

- Still photo
- Live action video
- Abstract visuals

The music can be no longer than 4 minutes in duration. You will then perform/execute the piece as an in-class assessment. The visuals should reflect the tone/mood of the music. You may use either hardware or software controllers for the performance.

You are not limited to just college equipment; you may bring in other lights/props for the performance.

Once complete, you will submit a technical log (Microsoft Word Document) documenting the working processes employed, a critical reflection on the processes and an evaluation and critique of the completed work

### **Sample Assignment 3: Group Performance.**

In groups, assigned by your tutor, you will plan and realise a live musical performance and accompanying lighting and visuals.

The music may be an original piece or a performance of a cover song. While recorded music is allowed, there must be at least one of each of the following:

- Live DJ (hardware or software)
- Live triggered sound – at least 3 elements (e.g. drums/pads/voice)
- Live bespoke visuals
- Live bespoke lighting.

You are not limited to just college equipment; you may bring in other lights/props for the performance.

Once complete, you will submit a technical log (Microsoft Word Document) documenting the working processes employed, a critical reflection on the processes and an evaluation and critique of the completed work.

## 6.15 Module 15: Research and Presentation

<b>Module Title</b>	Research and Presentation
<b>Module NFQ Level (only if an NFQ level can be demonstrated)</b>	7
<b>Module number/Reference</b>	BAAMT206
<b>Parent Programme</b>	BA (Hons) in Audio and Music Technology
<b>Stage of Parent Programme</b>	2
<b>Semester</b>	2
<b>Module Credit Units (FET/HET/ECTS)</b>	ECTS
<b>Module Credit number of Units</b>	5
<b>List the teaching and learning modes</b>	FT
<b>Entry requirements (statement of knowledge, skill and competence)</b>	Learner has earned Level 5 qualification. No previous experience is required
<b>Pre-requisite module titles</b>	None
<b>Co-requisite module titles</b>	None
<b>Is this a capstone module? (Yes or No)</b>	No
<b>Staff qualifications (academic, pedagogical and professional/occupational) and experience required. (staff includes workplace personnel who are responsible for learners such as apprentices, trainees and learners in clinical placements)</b>	Staff are required to have at least a Bachelor of Arts (Honours) qualification in Music Technology or related discipline. Industry experience would be a benefit but is not a requirement. Staff are expected to have the Certificate in Training and Education qualification from Griffith College or its equivalent.
<b>Staff/learner ratio per centre (or instance of the module)</b>	For lecture load, ratio of 1:50 lecturer to learner is required and in lab sessions the maximum allowed is 1:25 The lecturer will also have 1 hour per week set aside in their timetable for 1:1 contact with learners who require it or have particular items they want to discuss.
<b>Maximum number of learners per centre (or instance of the module)</b>	50
<b>Duration of the Module</b>	One Academic Semester, 12 weeks teaching
<b>Average (over the duration of the module) of the contact hours per week.</b>	3
<b>Physical resources and support required per centre (or instance of the module)</b>	One lecture hall with capacity at least 50.



Analysis of Required Learning Effort										
Effort while in contact with staff										
Classroom and Demonstrations	Mentoring and small group tutoring		Other (Specify)		Directed e-learning (hours)	Independent learning (hours)	Other hours (specify)	Work-based learning hours of learning effort	Total Effort (hours)	
	Hours	Minimum ratio teacher/learner	Hours	Minimum ratio teacher/learner						
24	1:50	12	1:25			89			125	
Allocation of marks (within the module)										
					Continuous Assessment	Supervised Project(s)	Proctored practical	Proctored Written Examination	Total	
Percentage contribution						80%	20%		100%	

### 6.15.1 Module Aims and Objectives

This module aims to develop learners' research skills, both in relation to their module related assignments and later in the completion of their final dissertation by research or practice. The module provides learners with the opportunity to learn specific research skills such as developing a research idea, investigating prior work in the area, writing a literature review and evaluating previous studies. The module aims to familiarise learners with the main research theories and concepts and enable learners to acquire skills in the research process including selecting and planning an appropriate research project, feasibility, execution, logging and tracking the practical process, data collection and analysis. The ultimate aim of the module is that learners will be able to conduct research effectively and to grasp the impact research can have.

### 6.15.2 Minimum Intended Module Learning Outcomes

On successful completion of this module the learner will be able to:

- MLO 15. 1 Demonstrate a detailed knowledge of the wide variety of information sources available to communication researchers.
- MLO 15. 2 Carry out the necessary preliminary investigations to support and underpin a proposal for research by practice and gather authoritative evidence to support findings.
- MLO 15.3 Recognise and apply ethical considerations to their research activities.
- MLO 15. 4 Assess, apply and interpret different quantitative and qualitative methods of research.
- MLO 15. 5 Assess the feasibility of a practical research project in terms of time, resources, cost, access to software and other resources.
- MLO 15. 6 Competently undertake, complete, and defend a detailed research proposal.

### 6.15.3 Rationale for inclusion of the module in the programme and its contribution to the overall IPLOs

This module serves to underpin the research required in the Dissertation module in Stage 3. Learners will develop necessary research and analytical skills required for an honours degree. The learning here helps in the learner's attainment of Programme Learning Outcome 8, while also serving to demonstrate attainment of outcome 4 and 8.

### 6.15.4 Information Provided to Learners about the Module

Learners enrolled on this module will receive a copy of the module descriptor and assignment briefs, including an outline of the criteria for assessment.

Previous examples of assignments are also presented to the class.

### 6.15.5 Module Content, Organisation, and Structure

The organisation of the module is to deliver theory through one 2-hour lecture per week and a 1-hour tutorial. There will also be individual formative assessment with the tutor

## **Module Content**

### **Introduction to Research Methods**

- Introduction of key words in research methods such as ‘quantitative’, ‘qualitative’ and ‘sample’ and explain what research involves.
- Description of common ethical principles and a discussion of how they can be applied to research projects.

### **Sourcing Information and Writing a Literature Review**

- How to source information effectively. Planning effective searches on the internet, evaluating documents and examining issues such as authenticity and credibility and using search engines effectively.
- Definition of and how to write a literature review.
- How to reference work and produce a bibliography correctly.

### **Developing a Research Idea**

- Developing a research idea for research by practice, whether this involves technical, musical, production or socio-cultural research.
- Interrogate the aims, objectives and goals of the research and develop research questions for possible research area.
- Considering the research deliverables, in terms of feasibility with respect to resources, time constraints, costs, access to technology, and the learner’s own level of experience in the field.

### **Research Tools**

- Interviewing, focus groups, survey research, logs and research diaries. Methods and means of analysis of data.

### **Writing a Research Proposal**

- Developing a writing style suitable for a research proposal. Analysis of proposals and common mistakes, which should be avoided.

### **6.15.6 Module Teaching and Learning Strategy**

The module is delivered through a combination of lectures and tutorials. The tutorials will provide opportunity for both peer review individual formative assessment with the tutor enabling learners to develop their research proposal.

Activity	Teaching / Learning Strategy	Learning Environment
<b>Lecture (24 hours)</b>	Lectures / participative discussions / case studies of research proposals / lecturer support in development of research interests and questions / critique of preliminary proposals with formative feedback and peer evaluation	College
<b>Tutorial (12 hours)</b>	Practicing research methods and using research databases / training in academic writing / participatory workshops and tutorials / preparation for detailed independent research	College
<b>Assignment (48 hours)</b>	Practice learning and perfecting research methods, academic writing and presentation skills	College
<b>Independent Work (41 hours)</b>	Directed and self-directed learning / home study / use of research resources	Home / Study

### 6.15.7 Timetabling, Learner Effort and Credit

The module is timetabled as one 3-hour session to the whole class, consisting of one 2-hour lecture and a 1-hour tutorial.

The number of credits assigned to this module is our assessment of the amount of learner effort required. It is our view that 5 ECTS of learner effort is required by learners coming new to the material to achieve the learning outcomes required.

### 6.15.8 Work-based Learning and Practice-placement

There is no work based learning or practical placement involved in the module.

### 6.15.9 E-Learning

The College VLE is used to disseminate notes, advice and online resources to support the learners. The learners are also given access to Lynda.com as a resource for reference.

### 6.15.10 Module Physical Resource Requirements

Requirements are for a fully equipped lecture hall and access for tutors to a meeting room when required, for individual formative assessments.

### 6.15.11 Reading lists and other learning materials

#### Recommended Reading

Bell, J. & Waters, S. (2014) *Doing your research project: a guide for first-time researchers*, Maidenhead: Open University Press.

Gallo, C. (2014) *Talk like TED*. Houndsmills Basingstoke: Macmillan.

### Secondary Reading

- Bethel, E. (2014) *Posters and presentations*. Houndsmills Basingstoke: Palgrave Macmillan.
- Cresswell, J.W. (2013) *Research design: qualitative, quantitative, and mixed method approaches*. Thousand Oaks: Sage.
- Duarte, N. (2009) *Slide: ology: the art and science of creating great presentations*. Sebastopol: O'Reilly.
- Thomas, G. (2011) *Doing research*. Houndsmills Basingstoke: Palgrave Macmillan.
- Williams, K. (2013) *Planning your dissertation*. Houndsmills Basingstoke: Palgrave Macmillan.
- Williams, K. & Carroll, J. (2009) *Referencing and understanding plagiarism*. Houndsmills Basingstoke: Palgrave Macmillan.

### 6.15.12 Specifications for Module Staffing Requirements

For each instance of the module, there will be one lecturer qualified to at least Bachelor of Arts (Honours) level in Music Technology or equivalent and with a relevant third level teaching qualification (e.g. Certificate in Training and Education). Depending on numbers a lab assistant may be required. Where this is the case the Assistant will be required to have a sound understanding of object oriented programming, either through industry experience or academic qualification. For example, a final year Bachelor of Music Production (Honours) learner may be suitable to assist the lecturer in lab sessions. Any lab assistant will work under the supervision of the lecture.

### 6.15.13 Module Assessment Strategy

Element No	Weight	Type	Description	Learning Outcomes Assessed
1	80%	Written Proposal	Learners will research and write a research proposal containing literature review and methodology section. As part of the proposal, learners will be required to attend scheduled meetings with a tutor for feedback. This will contribute to a continuous assessment element.	14.1 – 14.5
2	20%	Presentation	Presentation defending research proposal with question and answer section.	14.6

### 6.15.14 Sample Assessment Materials

Each participant will identify an area of research as negotiated with your tutor. You will then be required to conduct research appropriate to this level of study and disseminate the findings in the correct academic format.

The document should be well structured and include a literature review, methodology, analysis, conclusion and bibliography.

## 6.16 Module 16: Sound Reinforcement 2

<b>Module Title</b>	Sound Reinforcement 2
<b>Module NFQ Level (only if an NFQ level can be demonstrated)</b>	7
<b>Module number/Reference</b>	BAAMT207
<b>Parent Programme</b>	BA (Hons) in Audio and Music Technology
<b>Stage of Parent Programme</b>	2
<b>Semester</b>	2
<b>Module Credit Units (FET/HET/ECTS)</b>	ECTS
<b>Module Credit number of Units</b>	5
<b>List the teaching and learning modes</b>	FT
<b>Entry requirements (statement of knowledge, skill and competence)</b>	Learner has earned Level 5 qualification. No previous experience is required
<b>Pre-requisite module titles</b>	None
<b>Co-requisite module titles</b>	None
<b>Is this a capstone module? (Yes or No)</b>	No
<b>Staff qualifications (academic, pedagogical and professional/occupational) and experience required. (staff includes workplace personnel who are responsible for learners such as apprentices, trainees and learners in clinical placements)</b>	Staff are required to have at least a Bachelor of Arts (Honours) qualification in Music Technology or related discipline. Industry experience would be a benefit but is not a requirement. Staff are expected to have the Certificate in Training and Education qualification from Griffith College or its equivalent.
<b>Staff/learner ratio per centre (or instance of the module)</b>	For lecture load, ratio of 1:50 lecturer to learner is required and in lab sessions the maximum allowed is 1:25 The lecturer will also have 1 hour per week set aside in their timetable for 1:1 contact with learners who require it or have particular items they want to discuss.
<b>Maximum number of learners per centre (or instance of the module)</b>	50
<b>Duration of the Module</b>	One Academic Semester, 12 weeks teaching
<b>Average (over the duration of the module) of the contact hours per week.</b>	3
<b>Physical resources and support required per centre (or instance of the module)</b>	One lecture hall with capacity at least 50 and one practical lab with PA system.

Analysis of Required Learning Effort										
Effort while in contact with staff										
Classroom and Demonstrations	Mentoring and small group tutoring		Other (Specify)		Directed e-learning (hours)	Independent learning (hours)	Other hours (specify)	Work-based learning hours of learning effort	Total Effort (hours)	
	Hours	Minimum ratio teacher/learner	Hours	Minimum ratio teacher/learner						
24	1:50	12	1:25			89			125	
Allocation of marks (within the module)										
					Continuous Assessment	Supervised Project	Proctored practical	Proctored Written Examination	Total	
Percentage contribution						50%	50%		100%	

### 6.16.1 Module Objectives

The module aims to provide the learner with the knowledge and skill to configure Live Sound systems at a professional level. The learner is taught a thorough theoretical and operational understanding of industry standard analysis tools. This understanding is extended in appropriate sound system design and speaker interaction from the standpoint of phase, frequency and impulse response.

### 6.16.2 Minimum Intended Module Learning Outcomes

On successful completion of this module the learner will be able to:

- MLO 16.1 Demonstrate advanced knowledge of different transmission methods.
- MLO 16.2 Demonstrate proficiency in the use of acoustic analysis software.
- MLO 16.3 Examine and apply practical implementations of software analysis and predictions.
- MLO 16.4 Realise an event to a professional standard.

### 6.16.3 Rationale for inclusion of the module in the programme and its contribution to the overall IPLOs

Not only are sound systems becoming more numerous, but their capabilities continue to grow as more and more acts put an emphasis on live shows and touring. Market leading manufacturers continue to launch new technologies. This module, along with Sound Reinforcement 1, will equip learners with the skillset required to design and configure a pa system to professional standard. The learning in this module will contribute to learner's ability to achieve Programme Learning Outcomes 7 and 8.

### 6.16.4 Information Provided to Learners about the Module

Learners enrolled on this module will receive a copy of the module descriptor and assignment briefs, including an outline of the criteria for assessment.

Previous examples of assignments are also presented to the class.

### 6.16.5 Module Content, Organisation and Structure

The module is organised to deliver theory through lectures (2 hours) and supervised tutorials (1 hour). During tutorials, Learners are split into smaller groups of between 10 and 15 at the start of the module. This will allow the lecturer to work with smaller groups to demonstrate the material. Each learner will remain in the same group for the duration of the module. The lectures each week will combine lecture delivery and discussion on the material.

Each lecturer has a time allocated for one-to-one meetings with learners as required. These are not mandatory sessions but available either where the lecturer wishes to discuss an element of the module with a learner, or a learner requests a meeting to discuss a particular topic. These sessions focus on academic issues only.



**Module Content:****Different transmission methods.**

- Specification of a PA system for a given venue.
- Specification of an appropriate on-stage monitoring system.

**Acoustic analysis software**

- Industry standard software options.
- Measuring an acoustic environment.
- Interpreting an FFT and spectrogram.

**Practical implementations of software analysis and predictions**

- Specification of all necessary equipment.
- Implement predicted speaker positioning.
- Correct speaker alignment & optimization.

**Realising an event to a professional standard**

- A balanced sounding event with regard to spatial, spectral and dynamic processing.
- Appropriate health & safety considerations.
- Communication skills with clients and crew.

**6.16.6 Module Teaching and Learning Strategy**

The module is delivered through a combination of lectures and tutorials. The emphasis is on developing practical skills based on sound theoretical knowledge. It is not enough for learners to understand the theory in a module such as this. They need to practically apply skills in a systematic way. The weekly tutorials ensure they systematically work on each aspect of the curriculum. A lot of emphasis is put on the practical work. Live Sound/System engineering is not an easy competence to develop and requires a lot of practice.

Activity	Teaching / Learning Strategy	Learning Environment
<b>Lecture (24 hours)</b>	Lectures / participative discussions / case studies of live sound equipment and set ups / line array theory and practical implications of acoustical modelling software	College
<b>Tutorial (12 hours)</b>	Practicing live sound set up and use of equipment/ training in advanced use of sound equipment / practical application of acoustics theory / use of mixing tools and techniques	College / Studio
<b>Assignment (48 hours)</b>	Practice learning and perfecting acoustic analysis of live sound venues and PA systems	College
<b>Independent Work (41 hours)</b>	Directed and self-directed study / use of college studio spaces to practice skills	Home / College
<b>Examination</b>	Evaluation of knowledge and related skills	College

### 6.16.7 Timetabling, Learner Effort and Credit.

The module is timetabled as one 3-hour class for the whole class. Generally, this will consist of a 2-hour lecture followed by a 1-hour tutorial / practical class using a PA system and acoustical analysis and calibration software/hardware.

The number of credits assigned to this module is our assessment of the amount of learner effort required. It is our view that 5 ECTS of learner effort is required by learners coming new to the material to achieve the learning outcomes required.

### 6.16.8 Work-based Learning and Practice-placement

There is no work based learning or practical placement involved in the module.

### 6.16.9 E-Learning

The College VLE is used to disseminate notes, advice and online resources to support the learners. The learners are also given access to Lynda.com as a resource for reference.

### 6.16.10 Module Physical Resource Requirements

Requirements are for a fully equipped lecture hall and access for each group to a 1-hour session with a PA system. The PA system should have the means to control and configure calibration settings for the PA.

### 6.16.11 Reading lists and other Information Resources

#### Recommended Reading

McCarthy, B. (2006) *Sound systems: design and optimization*. Oxford: Focal Press.

Boyce, T. (2014) *Introduction to live sound reinforcement: the science, the art and the practice*. Victoria: Friesen Press.

Amundson, M. (2007) *Live sound: theory & practice*. Las Vegas: Timeless Communication.

Davis, G. & Jones, R. (1990) *Sound reinforcement handbook*, Milwaukee: Hal Leonard Corporation.

Kahrs, M. & Brandenburg, K. (1998) *Applications of digital processing to audio and acoustics*. New York: Springer.

### Secondary Reading

- Duncan, B. (2002) *The live sound manual* San Francisco: Backbeat Books.
- Gibson, B. (2011) *Ultimate live sound operator's handbook*. Milwaukee: Hal Leonard Corporation.
- Van Beek, M. (2004) *Electrical safety for live events*. Cambridge: Entertainment Technology Press.
- Hannam, C (2015) *Health and safety management in the live music and event technical industry*. Cambridge: Entertainment Technology Press.
- Eargle, J. & Foreman, C. (2008) *JBL audio engineering for sound reinforcement*. Milwaukee: Hal Leonard Corporation.
- Hunter-Stark, S. (2005) *Live sound reinforcement*. Milwaukee: Hal Leonard Corporation
- Moscal, T (1994) *Sound check: basics of sound & sound systems*. Milwaukee: Hal Leonard Corporation.
- Rayburn, R. (2011) *Eargle's the microphone book: From mono to stereo to surround - a guide to microphone design and application*. Oxford: Focal Press
- Carpenter, B (2013) *Live Sound Engineering Techniques: On Tour with Rush* Lynda.com

### 6.16.12 Specifications for Module Staffing Requirements

For each instance of the module, there will be one lecturer qualified to at least Bachelor of Arts (Honours) level in Sound Engineering or equivalent, and with a relevant third level teaching qualification (e.g. Certificate in Training and Education). Depending on numbers a lab assistant may be required. Where this is the case the Assistant will be required to have a sound understanding of Live sound concepts and workflows, either through industry experience or academic qualification. For example, a final year Bachelor of Arts (Honours) Music Production learner may be suitable to assist the lecturer in lab sessions. Any lab assistant will work under the supervision of the lecturer.

### 6.16.13 Module Summative Assessment Strategy

Element No	Weight	Type	Description	Learning Outcomes Assessed
1	50%	Assignment	Learners are required to conduct an acoustical analysis of a room and PA system. This should include details on Impulse response, phase and frequency response.	15.1 – 15.3
2	50%	Practical Examination	In this examination, learners will be required to configure and calibrate a PA system consisting of main front of house speakers and multiple stage monitors. Then they will be required to perform sound check and mix of a live performance. They will be assessed on sonic clarity, time management, communications and technique.	15.4

#### 6.16.14 Sample Assessment Materials

##### Assessment 1:

For this assignment, you must perform a full acoustical analysis of a P.A. system in a room/venue.

The room/venue must be decided on negotiation with your tutor.

From the findings, you will compile an acoustical survey report on the venue/room detailing:

- P.A. specs:
  - Make and model of all components
  - Crossover frequency points, filter type and order
  - Any system delay times (ms)
- Venue/room floor plan indicating P.A. positioning and measurement positions. (include room dimensions and any/all acoustic treatment in the room)
- An acoustical analysis of the room/venue from at least three different locations.
  - Impulse Response
  - Phase Response
  - Frequency response
- A technical log detailing a critical evaluation of the acoustical findings, identifying any potential problems/issues and your suggested solutions based on the findings.
- Where possible, you may employ the solutions and do another analysis showing the resolved issues.

## Assessment 2:

### Practical: Sound Check and Show. (30 Minutes)

For this assignment, you will be required to complete a system tuning and sound check of a live performance.

#### Tuning: (10 Minutes – 5%)

Using either your own voice or music, you will be required to tune (EQ) Front of House and Stage Monitors for a live event. You may ask your tutor to act as an 'assistant' to help operate any controls while you listen. The tutor will follow your exact instructions only. You should pay attention to sonic clarity and any/all feedback issues.

#### Sound Check (20 Mins - 90%)

For this task, you must complete a sound check of a live performance inside the allotted time. You will be required to gain and route all signals through the P.A. system and set up foldback for the artists.

You will be marked on the following areas:

#### 1: Technique (20%):

- Correct order of signal flow.
- Appropriate use of processing.

#### 2: Communications (10%).

#### 3: Time management (15%).

4: **Sound: (50%).** The evaluation of the sound will only occur at the end of the sound check. When you complete your sound check, you will inform your tutor that you are ready. At this point the artist will perform live, and the evaluation will be based on this sound. You may 'mix' this live. You will be graded on:

- Clarity / separation of instruments
- Balance
- Tone
- Use of processing
- Use of effects
- Spatial imaging

## 6.17 Module 17: Sound Design and Creative Processing

<b>Module Title</b>	Sound Design and Creative Processing
<b>Module NFQ Level (only if an NFQ level can be demonstrated)</b>	7
<b>Module number/Reference</b>	BAAMT208
<b>Parent Programme</b>	BA (Hons) in Audio and Music Technology
<b>Stage of Parent Programme</b>	2
<b>Semester</b>	1
<b>Module Credit Units (FET/HET/ECTS)</b>	ECTS
<b>Module Credit number of Units</b>	5
<b>List the teaching and learning modes</b>	FT
<b>Entry requirements (statement of knowledge, skill and competence)</b>	Learner has earned Level 5 qualification. No previous experience is required
<b>Pre-requisite module titles</b>	None
<b>Co-requisite module titles</b>	None
<b>Is this a capstone module? (Yes or No)</b>	No
<b>Staff qualifications (academic, pedagogical and professional/occupational) and experience required. (staff includes workplace personnel who are responsible for learners such as apprentices, trainees and learners in clinical placements)</b>	Staff are required to have at least a Bachelor of Arts (Honours) qualification in Music Technology or related discipline. Industry experience would be a benefit but is not a requirement. Staff are expected to have the Certificate in Training and Education qualification from Griffith College or its equivalent.
<b>Staff/learner ratio per centre (or instance of the module)</b>	For lecture load, ratio of 1:50 lecturer to learner is required and in lab sessions the maximum allowed is 1:25 The lecturer will also have 1 hour per week set aside in their timetable for 1:1 contact with learners who require it or have particular items they want to discuss.
<b>Maximum number of learners per centre (or instance of the module)</b>	50
<b>Duration of the Module</b>	One Academic Semester, 12 weeks teaching
<b>Average (over the duration of the module) of the contact hours per week.</b>	3
<b>Physical resources and support required per centre (or instance of the module)</b>	One lecture hall with capacity at least 50 and one practical lab with PA system.

Analysis of Required Learning Effort									
Effort while in contact with staff									
Classroom and Demonstrations	Mentoring and small group tutoring	Other (Specify)		Directed e-learning (hours)	Independent learning (hours)	Other hours (specify)	Work-based learning hours of learning effort	Total Effort (hours)	
		Hours	Minimum ratio teacher/learner						Hours
24	12	1:50	1:25		89			125	
Allocation of marks (within the module)									
					Supervised Project	Proctored practical	Proctored Written Examination	Total	
Percentage contribution					100%			100%	

### 6.17.1 Module Objectives

This module is intended to develop and deepen the learner's understanding of sound design by investigating creative sound processing. Editing techniques, audio restoration techniques and the application of filters and effects are investigated. Dialogue and environment sound creation are investigated using sound design theory and developed using creative processes.

### 6.17.2 Minimum Intended Module Learning Outcomes

On successful completion of this module the learner will be able to:

- MLO 17.1 Creatively use sound design for various projects.
- MLO 17.2 Demonstrate proficiency in a broad range of creative audio processing techniques.
- MLO 17.3 Evidence effective editing and processing techniques for dialogue and sound effect production.
- MLO 17.4 Analyse and critique the production of creative sound worlds within games and film.

### 6.17.3 Rationale for inclusion of the module in the programme and its contribution to the overall IPLOs.

As with other disciplines in audio, it takes time to develop the skills. This module will give the learners more opportunity with the methods and practices of Sound Design and help them develop a creativity of their own. The learning in this module will contribute to Programme Learning Outcomes 3 and 12, while also helping learners in achieving outcome 1 and 4.

### 6.17.4 Information Provided to Learners about the Module

Learners enrolled on this module will receive a copy of the module descriptor and assignment briefs, including an outline of the criteria for assessment.

Previous examples of assignments are also presented to the class.

### 6.17.5 Module Content, Organisation and Structure

The module is organised to deliver theory through lectures (2 hours) and supervised tutorials (1 hours). During tutorials, learners will work individually on computer workstations. This will allow the lecturer to work with smaller groups to demonstrate the material.

The lectures each week will combine lecture delivery and discussion on the material.

Each lecturer has a time allocated for one-to-one meetings with learners as required. These are not mandatory sessions but available either where the lecturer wishes to discuss an element of the module with a learner, or a learner requests a meeting to discuss a particular topic. These sessions focus on academic issues only.



## Module Content:

### Elements of creative sound design

- An effective application of creative sound processing techniques.
- Definitions of frequency and dynamic control.
- Concepts within audio processing practice.

### Creative audio processing techniques

- Creative sample rate application.
- Digital Signal Processing principles.
- Frequency and Time domains.

### Editing and processing techniques for dialogue and sound effect production

- Sound Effect and Dialogue editing techniques.
- Application of filters and effects for sound transformation.
- Audio Enhancement.

### Analysis of production of creative sound worlds within games and film

- Evidence of research.
- Creation and manipulation of original sound effects.
- Audio processing techniques.
- Use of EQ, Compression and Limiting.

## 6.17.6 Module Teaching and Learning Strategy

This module is delivered through a combination of lectures, tutorials and practical sessions. The emphasis will be on learners to take the theoretical knowledge and apply it practically to develop the skills required. Learners will need to work on material outside of the lab and in studios. Industry professionals will be brought in to do workshops and discuss standards, techniques and best practice for session management.

Activity	Teaching / Learning Strategy	Learning Environment
<b>Lecture (24 hours)</b>	Lectures / participative discussions / case studies of key practitioners / sound design and creative processing techniques	College
<b>Tutorial (12 hours)</b>	Practicing sound design and processing skills / training in advanced use of creative processing using plug ins and DAW software / practical application of theory from lecture	College / Mac lab
<b>Assignment (48 hours)</b>	Practice learning and perfecting sound design and processing skills	College
<b>Independent Work (41 hours)</b>	Directed and self-directed learning / home study	College / Home

### 6.17.7 Timetabling, Learner Effort and Credit

The module is timetabled as one 3 lecture to the whole class. These will generally take the form of a 2-hour lecture followed by a 1-hour tutorial on workstations allowing the lecturer to work individually with learners to demonstrate the material.

It is our view that 5 ECTS of learner effort is required by learners coming new to the material to achieve the learning outcomes required.

### 6.17.8 Work-based Learning and Practice-placement

There is no work based learning or practical placement involved in the module.

### 6.17.9 E-Learning

The College VLE is used to disseminate notes, advice and online resources to support the learners. The learners are also given access to Lynda.com as a resource for reference.

### 6.17.10 Module Physical Resource Requirements

Requirements are for a fully equipped lecture hall and access for each group to a lab with computer workstations. Each workstation should have audio synthesis and editing software. Learners will require bookable studio access for recording elements.

### 6.17.11 Reading Lists and other Information Resources

#### Recommended Reading

Sonnenschein, D. (2001) *Sound design: the expressive power of music, voice, and sound effects in cinema*. Studio City CA: Michael Wiese Productions

Viers, R. (2008) *The sound effects bible: how to create and record Hollywood style sound effects*. Studio City, CA: Michael Wiese Productions

#### Secondary Reading

Collins, K. (2008) *Game sound: an introduction to the history, theory, and practice of video game music and sound design*. Cambridge MA: MIT Press.

Farrell, A. (2010) *Designing sound*. Cambridge MA: MIT Press.

Hirsch, S. (2015) *Sound design for motion graphics*. Lynda.com

Kaye, D. & LeBrecht, J. (2015) *Sound and music for the theatre: the art and technique of design*. London: Focal Press.

Marks, A. (2008) *The complete guide to game audio: for composers, musicians, sound designers, and game developers*. Oxford: Focal Press

Beauchamp, R., (2005) *Designing sound for animation*. Oxford: Focal Press

Lee White, B. (2013) *Crafting Sound Design (from course Producing Music For Advertisements)* Lynda.com

### 6.17.12 Specifications for Module Staffing Requirements

For each instance of the module, there will be one lecturer qualified to at least Bachelor of Arts (Honours) level in Music Technology or equivalent and with a relevant third level teaching qualification (e.g. Certificate in Training and Education). Depending on numbers a lab assistant may be required. Where this is the case the Assistant will be required to have a sound understanding of sound design, either through industry experience or academic qualification. For example, a final year Bachelor of Music Production (Honours) learner may be suitable to assist the lecturer in lab sessions. Any lab assistant will work under the supervision of the lecturer.

### 6.17.13 Module Summative Assessment Strategy

Element No	Weighting	Type	Description	Learning Outcomes Assessed
1	40%	Project	Create a fixed media sound design work using only one sample as the basis of the entire sound world	16.1 - 16.4
2	60%	Project	Create three soundscape environments: Machine, Underwater, Space with an accompanying document describing the processes involved.	16.1 - 6.4

### 6.17.14 Sample Assessment Materials

#### Assessment 1

##### Sound design for fixed media

Create a stereo format, sound design work using only white noise. Learners will be provided with a video (<https://vimeo.com/101501138>), where each UI sound needs to be replaced and re-created. You are free, however, to employ as many plugins and editing techniques as you deem necessary. The final audio must be delivered as a Stereo, 44.1kHz, 16bit, Wav file.

#### Assessment 2

##### Soundscape creation

Create three one-minute soundscape environments that illustrate the world of Machine, Underwater and Space. Pay careful attention to illustrate the perspective audio depth of background, middle-ground, and foreground. Include a document that describes an overview of your inspiration, workflow and production process.

## 6.18 Module 18: Client Project 1.

<b>Module Title</b>	Client Project 1
<b>Module NFQ Level (only if an NFQ level can be demonstrated)</b>	BAAMT209
<b>Module number/Reference</b>	18
<b>Parent Programme</b>	BA (Hons) in Audio and Music Technology
<b>Stage of Parent Programme</b>	2
<b>Semester</b>	2 and summer
<b>Module Credit Units (FET/HET/ECTS)</b>	ECTS
<b>Module Credit number of Units</b>	10
<b>List the teaching and learning modes</b>	FT
<b>Entry requirements (statement of knowledge, skill and competence)</b>	Learner has earned Level 5 qualification. No previous applications technology ability is required.
<b>Pre-requisite module titles</b>	None
<b>Co-requisite module titles</b>	None
<b>Is this a capstone module? (Yes or No)</b>	No
<b>Staff qualifications (academic, pedagogical and professional/occupational) and experience required. (staff includes workplace personnel who are responsible for learners such as apprentices, trainees and learners in clinical placements)</b>	Staff are required to have at least a Bachelor of Arts (Honours) qualification in Music Technology or related discipline. Industry experience would be a benefit but is not a requirement. Staff are expected to have the Certificate in Training and Education qualification from Griffith College or its equivalent.
<b>Staff/learner ratio per centre (or instance of the module)</b>	For lecture load, ratio of 1:50 lecturer to learner is required and in lab sessions the maximum allowed is 1:25 The lecturer will also have 1 hour per week set aside in their timetable for 1:1 contact with learners who require it or have particular items they want to discuss.
<b>Maximum number of learners per centre (or instance of the module)</b>	50
<b>Duration of the Module</b>	One Academic Semester, 12 weeks teaching
<b>Average (over the duration of the module) of the contact hours per week.</b>	3
<b>Physical resources and support required per centre (or instance of the module)</b>	One lecture hall with capacity at least 50 and one computer lab with capacity of 25.

Analysis of Required Learning Effort									
Effort while in contact with staff									
Classroom and Demonstrations	Mentoring and small group tutoring	Other (Specify)		Directed e-learning (hours)	Independent learning (hours)	Other hours (specify)	Work-based learning hours of learner effort	Total Effort (hours)	
		Hours	Minimum ratio teacher/learner						
24	12	1:50	1:25		76		113	250	
Allocation of marks (within the module)									
				Continuous Assessment	Supervised Project(s)	Proctored practical	Proctored Written Examination	Total	
Percentage contribution				20%	80%			100%	

### 6.18.1 Module Aims and Objectives

This module aims to develop the learner's ability to work at a professional level in the role of an audio professional. The learner is encouraged to utilise technical and interpersonal skills to facilitate the smooth flow of a project through its various stages from pre-production to completion.

### **6.18.2 Minimum Intended Module Learning Outcomes**

On successful completion of this module the learner will be able to:

- 18.1 Assume the role of producer for a client.
- 18.2 Manage the technical elements of a project from pre-production to final realisation of project
- 18.3 Plan and budget a project effectively
- 18.4 Produce within a deadline a fully realised project to industry standard.
- 18.5 Communicate effectively with personnel and artists.

### **6.18.3 Rationale for inclusion of the module in the programme and its contribution to the overall IPLOs**

This module aims to give the learners direct experience of real-life work problems in the music industry through triangulation between industry, tutors and learners.

The client based project will require learners to work with a client to produce original works. Learners will be encouraged to source their own client for this project and to submit the client proposal for approval by the College.

The module addresses Programme Learning Outcomes 8 and 9 while also underpinning knowledge and skills for Outcomes 5 and 10.

### **6.18.4 Information Provided to Learners about the Module**

Learners enrolled on this module will receive a copy of the module descriptor and assignment briefs, including an outline of the criteria for assessment.

Previous examples of assignments are also presented to the class.

### **6.18.5 Module Content, Organisation, and Structure**

The module is organised to deliver theory through lectures (2-hours) and supervised tutorials (1-hour). During tutorials, each learner will have a workstation allowing the lecturer to work individually with learners to demonstrate and explain the material.

The 1-hour lectures each week will combine lecture delivery and discussion on the material.

Each lecturer has a time allocated for one-to-one meetings with learners as required. These are not mandatory sessions but available either where the lecturer wishes to discuss an element of the module with a learner, or a learner requests a meeting to discuss a particular topic. These sessions focus on academic issues only.

### Module Content

The curriculum for this module involves the practical application of the content of Module 13: Recording and Mixing

#### Client

- project pitching
- liasing

#### Peer group

- observation
- assessment
- feedback

#### Tutorials

- project management & development
- client/learner/tutor triangulation

### 6.18.6 Module Teaching and Learning Strategy

Regular tutorials with programme leaders will run in parallel with the large body of individual work undertaken in this module. Peer group observation, peer assessment and peer group feedback will assist learner development through group tutorials.

Activity	Teaching / Learning Strategy	Learning Environment
<b>Tutorial (36 hours)</b>	In-depth focus on music production elements / music technology exercises and mastering. Peer group observation, assessment and feedback.	College / Mac lab
<b>Assignment (113 hours)</b>	Practice learning and perfecting music production and music technology skills/ client liason required for producers	College
<b>Independent Work (76 hours)</b>	Directed and self-directed learning / home study / access to online resources	College / Home

### 6.18.7 Timetabling, Learner Effort and Credit

The module is timetabled as one 3-hour lecture to the whole class. This will consist of the 2-hour lecture, and a 1-hour lab tutorial.

The number of credits assigned to this module is our assessment of the learner effort required. It is our view that 10 ECTS of learner effort is required by learners coming new to the material to achieve the learning outcomes required.

### 6.18.8 Work-based Learning and Practice-placement

There is no work based learning or practical placement involved in the module.

### 6.18.9 E-Learning

The College VLE is used to disseminate notes, advice and online resources to support the learners. The learners are also given access to Lynda.com as a resource for reference.

### 6.18.10 Module Physical Resource Requirements

Requirements are for a fully equipped lecture hall and access for each group to 1.0 hour sessions in a computer lab. Individuals will also need access to recording studios, editing suites, PA system and/or audio post-productions suites as per the needs of their project.

### 6.18.11 Reading lists and other learning materials

#### Recommended reading

Maylor, H., 2010. *Project management*, Harlow England: Financial Times Prentice Hall.  
Cook, Frank D., 2016. *Pro Tools 210M*, London England: Avid Learning Series.  
Dvorin, David., 2015. *Logic Pro X Advanced Audio Production*, Berkeley CA: Peachpit Press.  
Massy, S., 2017. *Sylvia Massy: Unconventional Recording*. Lynda.com  
Crane, L., 2016 *Music Production Secrets*. Lynda.com

#### Secondary reading

Cole, B. (2006) *The pop composer's handbook: a step by step guide to the composition of melody, harmony, rhythm and structure*. London: Schott.  
Rumsey, F. (2004) *Desktop audio technology: digital audio and MIDI principles*. Oxford: Focal

### 6.18.12 Specifications for Module Staffing Requirements

For each instance of the module, there will be one lecturer qualified to at least Bachelor of Arts (Honours) level in Music or equivalent, and with a relevant third level teaching qualification (e.g. Certificate in Training and Education). Depending on numbers a lab assistant may be required. Where this is the case the Assistant will be required to have a sound understanding of music theory, either through industry experience or academic qualification. For example, a final year Bachelor of Music Production (Honours) learner may be suitable to assist the lecturer in lab sessions. Any lab assistant will work under the supervision of the lecturer.



### 6.18.13 Module Summative Assessment Strategy

Name	Description	Weight	Learning Outcomes
Assignment 1: Client Based Project	For this assignment, learners will have the opportunity to develop project material provided by a chosen client and produce production studies appropriate to the given material.	60%	1. 2. 3. 4. 5.
Assignment 2: Continuous Assessment	Continual assessment of the project's development will be undertaken through production/progress meetings during the course of the module.	20%	2. 3.
Assignment 3: Documentation	Learners are required to document the development of the client project; critical reflection of self and working process and evaluation of the completed artefacts is required.	20%	4. 5.

### 6.18.14 Sample Assessment Materials

#### Client Based Assignment

The ability to appraise the potential of a client's musical material is an aspect of the role of an audio professional. Often the engineer/producer is presented with under developed material by a client who lacks the critical skills the audio professional has to identify and develop a complete production.

In the role of audio professional your processes will require experimentation with a range of approaches and consider aspects of delivery and presentation. The pre-production aspects of the work will be crucial as to the most effective way of developing the material/project. In this assignment you will have the opportunity to develop a range of material provided to you by your chosen client.

Working independently you will fully develop the material/project from that presented to you by your client.

**The form of which must be negotiated and agreed with the tutors through the production meeting/tutorial process.**

There are no strict requirements as regards to the project, its form and delivery but your completed project should display an understanding of the material chosen.

The production approaches of the works should evidence effective management of processes. Production meetings will be held and will form part of the assessment of this assignment. The production meetings will be peer reviewed. You must articulate clear ideas and working methodologies applicable to your chosen materials.

## 6.19 Module 19: Dissertation by Practice

<b>Module Title</b>	Dissertation by Practice
<b>Module NFQ Level (only if an NFQ level can be demonstrated)</b>	8
<b>Module number/Reference</b>	BAAMT301
<b>Parent Programme</b>	BA (Hons) in Audio and Music Technology
<b>Stage of Parent Programme</b>	3
<b>Semester</b>	1, 2
<b>Module Credit Units (FET/HET/ECTS)</b>	ECTS
<b>Module Credit number of Units</b>	20
<b>List the teaching and learning modes</b>	FT
<b>Entry requirements (statement of knowledge, skill and competence)</b>	Learner has earned Level 5 qualification. No previous experience is required
<b>Pre-requisite module titles</b>	None
<b>Co-requisite module titles</b>	None
<b>Is this a capstone module? (Yes or No)</b>	No
<b>Staff qualifications (academic, pedagogical and professional/occupational) and experience required. (staff includes workplace personnel who are responsible for learners such as apprentices, trainees and learners in clinical placements)</b>	Staff are required to have at least a Master's qualification in Audio and Music Technology or related discipline. Industry experience would be a benefit but is not a requirement. Staff are expected to have the Certificate in Training and Education qualification from Griffith College or its equivalent.
<b>Staff/learner ratio per centre (or instance of the module)</b>	For lecture load, ratio of 1:50 lecturer to learner is required and in lab sessions the maximum allowed is 1:25 The lecturer will also have 1 hour per week set aside in their timetable for 1:1 contact with learners who require it or have particular items they want to discuss.
<b>Maximum number of learners per centre (or instance of the module)</b>	50
<b>Duration of the Module</b>	Two Academic Semester, 24 weeks teaching
<b>Average (over the duration of the module) of the contact hours per week.</b>	3
<b>Physical resources and support required per centre (or instance of the module)</b>	One lecture hall with capacity at least 50 and one computer lab with capacity of 25.

Analysis of Required Learning Effort										
Effort while in contact with staff										
Classroom and Demonstrations		Mentoring and small group tutoring		Other (Specify)		Directed e-learning (hours)	Independent learning (hours)	Other hours (specify)	Work-based learning hours of learning effort	Total Effort (hours)
Hours	Minimum ratio teacher/learner	Hours	Minimum ratio teacher/learner	Hours	Minimum ratio teacher/learner					
48	1:50	24	1:25				428			500
Allocation of marks (within the module)										
						Continuous Assessment	Supervised Project	Proctored practical	Proctored Written Examination	Total
Percentage contribution						15%	70%	15%		100%

### 6.19.1 Module Aims Objectives

The objectives of this module are to stimulate curiosity in exploring new ideas through research; to develop independent research and learning skills through the application of tested methodologies; to develop the skills necessary to plan and produce an extended, formally written document; to develop creativity through independent practical work and expand knowledge in areas of personal interest.

The module aims to develop the learner's research and learning skills. It also aims to stimulate the learner's imagination and creativity through research by practice, or writing and researching, and to enable the learner to critically consider the chosen subject of the dissertation.

The practice element should strongly inform the written element. The research of current practitioners in the chosen field should illustrate potential points of departure into new and hitherto undeveloped areas of interest.

### **6.19.2 Minimum Intended Module Learning Outcomes**

On successful completion of this module the learner will be able to:

- MLO 19.1 Competently select and apply appropriate research to the implementation of academic research or research by practice.
- MLO 19.2 Complete significant research into specialist topics and present findings, insights, hypotheses, or original creative outcomes reflecting a thorough comprehension of the concepts and techniques involved.
- MLO 19.3 Design and manage a personal programme of study within non-negotiable deadlines.
- MLO 19.4 Demonstrate critical knowledge in an area that is of personal interest and also reflects the general content and ethos of the programme.
- MLO 19.5 Produce a dissertation, in writing, or in writing and by practice, that poses and answers specified research questions relating to music, music production, or socio-cultural topics.
- MLO 19.6 Write coherently, respecting academic conventions, and presenting information in a professional manner.

### **6.19.3 Rationale for inclusion of the module in the programme and its contribution to the overall IPLOs**

This core module will be the culmination of the learner's study. Learners will explore, through research and writing, subjects deemed worthy of academic investigation, or the expansion and development of new ideas through practice. The learner may select to present an academic dissertation or a dissertation by practice. This module contributes significantly to the learners' achievement of Programme learning outcome 4 while also contributing to Outcomes 11 and 12.

### **6.19.4 Information Provided to Learners about the Module**

Learners enrolled on this module will receive a copy of the module descriptor and assignment briefs, including an outline of the criteria for assessment.

Previous examples of assignments are also presented to the class.

### **6.19.5 Module Content, Organisation and Structure**

The organisation of the module is to deliver theory through one 2-hour lecture per week, and a 1-hour tutorial.

However due to the individual requirements of each Learner, as the projects progress, this time will be broken down into individual time slots per learner for support and feedback.

## Module Content

This is a bespoke or learner-centred module and learners are expected to define much of the content of the learning. The fundamental skill of learning to write using formal English exists in tandem with an in-depth exploration of the chosen topic.

### Approaches to writing a dissertation

- Selecting a topic, with reference to the spirit and ethos of the programme.
- Defining key questions that will prompt research and focus the structure and content of the dissertation.
- Creating and regularly up-dating a plan of the dissertation.
- Keeping a detailed log of the research process.
- Analysing primary and secondary research material.
- Writing and communicating clearly sophisticated concepts and ideas.
- Working to specific deadlines.

### 6.19.6 Module Teaching and Learning Strategy

This module is delivered through a combination lectures and tutorials. Lectures will cover theory and group discussion of research proposals. Learners will also be required to attend individual formative assessment meetings with their tutor as a means of feedback and support. As this module centres around the individual dissertations, learners will be required to put in a large amount of independent work outside of the timetabled hours.

Activity	Teaching / Learning Strategy	Learning Environment
Lecture (48 hours)	Lectures / participative discussions of research topics / case studies of research proposals and dissertations / academic writing instruction	College
Tutorial (24 hours)	One-to-one support and feedback with appointed tutor / direction with research proposal and project including planning, objectives and research questions	College
Assignment (200 hours)	Practice learning and perfecting dissertation by practice skills	College
Independent Work (228 hours)	Directed and self-directed learning / working to meet set deadlines by tutors / home study	College / Home

### 6.19.7 Timetabling, Learner Effort and Credit

The module is timetabled as one 3-hour session to the whole class, consisting of one 2-hour lecture and a 1-hour tutorial.

The module is a 20-credit module in order to ensure that the project has a scope that is achievable for the learner, and yet allows a substantial piece of work to be completed.

### 6.19.8 Work-based Learning and Practice-placement

There is no work based learning or practical placement involved in the module.

### 6.19.9 E-Learning

The College VLE is used to disseminate notes, advice and online resources to support the learners. The learners are also given access to Lynda.com as a resource for reference.

### 6.19.10 Module Physical Resource Requirements

Requirements are for a fully equipped lecture hall and access for tutors to a meeting room when required, for individual formative assessments.

### 6.19.11 Reading lists and other learning materials

#### Recommended Reading

Bell, J. & Waters, S. (2014) *Doing your research project: a guide for first-time researchers*, Maidenhead: Open University Press.

Walliman, N. (2013) *Your undergraduate dissertation: the essential guide for success*, London: SAGE.

#### Secondary Reading

Cotterill, S. (2011) *Critical thinking skills: developing effective analysis and argument*. Basingstoke: Palgrave Macmillan

Cotterill, S. (2014) *Dissertations and project reports: a step by step guide*. Basingstoke: Palgrave Macmillan

Day, T. (2013) *Success in academic writing*. Basingstoke: Palgrave Macmillan

Thomas, G. (2011) *Doing research*. Houndsmills Basingstoke: Palgrave Macmillan.

Williams, K. (2013) *Planning your dissertation*. Houndsmills Basingstoke: Palgrave Macmillan.

Williams, K. & Carroll, J. (2009) *Referencing and understanding plagiarism*. Houndsmills Basingstoke: Palgrave Macmillan.

### 6.19.12 Specifications for Module Staffing Requirements

For each instance of the module, there will be one lecturer qualified to at least Master's level in Music Technology or equivalent and with a relevant third level teaching qualification (e.g. Certificate in Training and Education). Depending on numbers a lab assistant may be required. Where this is the case the Assistant will be required to have a sound understanding of sound design, either through industry experience or academic qualification. For example, a postgraduate student of Audio and Music Production may be suitable to assist the lecturer in lab sessions. Any lab assistant will work under the supervision of the lecturer.

### 6.19.13 Module Summative Assessment Strategy

The following represents the breakdown of marks for the dissertation by research:

Element No	Weight	Type	Description	Learning Outcomes Assessed
1	70%	Project	Written Dissertation of 10,000 – 12,000 words, excluding bibliography and appendices	17.1, 17.2, 17.5, 17.6
2	15%	Continuous Assessment	Process / Management	17.3
3	15%	Project	Presentation / Defence	17.4

The following represents the breakdown of marks for the dissertation by practice:

Element No	Weighting	Type	Description	Learning Outcomes Assessed
1	30%	Practical	Practical Application / Work	17.1, 17.2,
2	40%	Assignment	Comprehensive Written Report of 6,000 – 8,000 words	17.5, 17.6
3	15%	Continuous Assessment	Process / Management	17.3
4	15%	Presentation	Presentation / Defence	17.4

### 6.19.14 Sample Assessment Materials

**Dissertation by Practice:**

**Dissertation by contains the following elements:**

#### **Practical Application: (30%)**

**Introduction:**

There are no fixed parameters to the format of the Practical Application / Work. Depending on the nature of your research by practice, disseminating the practical outcome of the research might lead to a performance, an installation, a demonstration, a workshop or an academic presentation of media generated by the research question and methodology.

**Brief:**

The Practical Application / Work should be fully realised, and your research findings disseminated in a form that is developed in the process of the investigation. If required, you are responsible for recruiting, managing and leading a team, to assist in the preparation, archiving and realisation of your Practical Application / Work. Through the tutorial process, the means for disseminating the Practical Application / Work, in terms of resources, venue and any other requirements that are specific to your project, will be discussed.

**Aims:**

- to stimulate curiosity in exploring new ideas through research;
- to develop independent research and learning skills through the application of tested methodologies;
- to develop the skills necessary to plan and produce an extended, formally written document;
- to develop creativity through independent practical work and expand knowledge in areas of personal interest.

**Requirements:**

1. Dissertation: research by Practice

**One from the following list of assessment criteria will be negotiated with the module tutor.**

1. Creative Practice
2. Recording
3. Musical Composition

**Written report: 40%****Introduction:**

The investigation and research you undertake in this module is student-driven. Under the initial supervision of a tutor you are to develop and focus your research questions and methodologies into an aspect of practice as research. The early stages will lead to a proposal being made to the supervisory team. You are expected to explore a variety of forms as a means to disseminate your investigation at various stages and develop this through to final submission. Also, you are expected to maintain an archive throughout the project in the format most appropriate to the nature of your work.

**Brief:**

You must submit a Written Report that facilitates dissemination of the nature of investigation. This is to be a negotiated body of work which provides a written contextual analysis of the practical investigation. It will take the form of a written document (6000 to 8,000 words maximum). The form of submission should be negotiated with tutors.

**Aims:**

- Practice independent research and learning skills;
- Test methodologies of practice-as-research;
- Apply aspects of a personal development plan;
- Explore how practice can inform theoretical knowledge;
- Appraise the skills necessary to disseminate research findings in forms that respect academic conventions. Requirements: 1 x Written report (6,000 – 8,000 words)



**The following assessment criteria may be used to assess Written Report Assignment two**

1. Research and Sources
2. Knowledge and Understanding
3. Analysis and Argument
4. Structure and Organisation
5. Standard of Presentation
6. Effectiveness of Written English
7. Bibliography and References.

**Presentation / Defence (15%)**

**Introduction**

The presentation / defence together allow for an evaluation of the development, presentation of your work and contextualisation. Your presentation / defence will take place at an agreed time following your submission of the main body of work.

**Brief**

In presentation / defence you will be asked to articulate your understanding of the issues involved in the assignment. Particular emphasis will be placed on evaluation, contextualisation and meeting of learning outcomes. Where applicable the issues discussed may include, your interpretation of the assignment brief, working processes employed in developing the dissertation, your approach to the logistical parameters encountered, and aesthetic considerations.

**Aims:**

- to disseminate the learner's reflections and critical evaluation throughout the composition process
- to allow the learner to disseminate a reflective commentary following completion of the dissertation.
- to promote the skills of discussing and commenting on academic bodies of work.

**The following Assessment Criteria will be used to assess your presentation / defence:**

- Understanding and articulation of key concepts
- Coherence, clarity and conciseness of language
- Understanding and articulation of research and analysis
- Evaluation upon the project

## 6.20 Module 20: Mixing and Mastering

<b>Module Title</b>	Mixing and Mastering
<b>Module NFQ Level (only if an NFQ level can be demonstrated)</b>	8
<b>Module number/Reference</b>	BAAMT302
<b>Parent Programme</b>	BA (HONS) Audio and Music Technology
<b>Stage of Parent Programme</b>	3
<b>Semester</b>	1 and 2
<b>Module Credit Units (FET/HET/ECTS)</b>	ECTS
<b>Module Credit number of Units</b>	10
<b>List the teaching and learning modes</b>	FT
<b>Entry requirements (statement of knowledge, skill and competence)</b>	Learner has earned Level 5 qualification. No previous applications technology ability is required.
<b>Pre-requisite module titles</b>	None
<b>Co-requisite module titles</b>	None
<b>Is this a capstone module? (Yes or No)</b>	No
<b>Staff qualifications (academic, pedagogical and professional/occupational) and experience required. (staff includes workplace personnel who are responsible for learners such as apprentices, trainees and learners in clinical placements)</b>	Staff are required to have at least a Master's qualification in Audio and Music Technology or related discipline. Industry experience would be a benefit but is not a requirement. Staff are expected to have the Certificate in Training and Education qualification from Griffith College or its equivalent.
<b>Staff/learner ratio per centre (or instance of the module)</b>	For lecture load, ratio of 1:50 lecturer to learner is required and in lab sessions the maximum allowed is 1:25 The lecturer will also have 1 hour per week set aside in their timetable for 1:1 contact with learners who require it or have particular items they want to discuss.
<b>Maximum number of learners per centre (or instance of the module)</b>	50
<b>Duration of the Module</b>	Two Academic Semesters, 24 weeks teaching
<b>Average (over the duration of the module) of the contact hours per week.</b>	3
<b>Physical resources and support required per centre (or instance of the module)</b>	One lecture hall with capacity at least 50 and one computer lab with capacity of 25.

Analysis of Required Learning Effort									
Effort while in contact with staff									
Classroom and Demonstrations	Mentoring and small group tutoring		Other (Specify)		Directed e-learning (hours)	Independent learning (hours)	Other hours (specify)	Work-based learning hours of learning effort	Total Effort (hours)
	Hours	Minimum ratio teacher/learner	Hours	Minimum ratio teacher/learner					
48	1:50	24	1:25			178			250
Allocation of marks (within the module)									
					Continuous Assessment	Supervised Project(s)	Proctored practical	Proctored Written Examination	Total
Percentage contribution					10%	90%			100%

### 6.20.1 Module Aims and Objectives

This module aims to develop learner’s ability to create professional quality mixes and master audio across a wide range of genres and listening platforms. All aspects of the mixing process are explored in detail with focus on the technical aspects along with the psychoacoustic considerations. In-depth analysis and comparison of analogue versus “in the box” mixing is undertaken. The second element of this module focusses on the mastering stage. Traditional mastering techniques such as Limiting, Mid Side Processing, Over-Sampling and Dither are explored in detail.

## 6.20.2 Minimum Intended Module Learning Outcomes

On successful completion of this module the learner will be able to:

- MLO 20.1 Apply sophisticated mixing techniques across the diversity of different genres
- MLO 20.2 Apply sophisticated and creative techniques using professional mixing tools.
- MLO 20.3 Illustrate informed selection and application of advanced mastering techniques.
- MLO 20.4 Exhibit comprehensive knowledge of deliverable formats for music.

## 6.20.3 Rationale for inclusion of the module in the programme and its contribution to the overall IPLOs

There has been a major shift over the last 10 years in how people listen to music with the introduction of programs like Apple Music and streaming services such as Spotify and Pandora. This module explores and analyses the impact this has on traditional mixing and mastering techniques. The learning in this module will contribute directly to the learner's ability to achieve Programme Learning Outcomes 5 and 6, while also serving as an important factor in Outcomes 2 and 8.

## 6.20.4 Information Provided to Learners about the Module

Learners enrolled on this module will receive a copy of the module descriptor and assignment briefs, including an outline of the criteria for assessment.

Previous examples of assignments are also presented to the class.

## 6.20.5 Module Content, Organisation and Structure

The module is organised to deliver theory through lectures (2 Hours) and supervised tutorials (1 Hour). During tutorials, each learner will have a workstation allowing the lecturer to work individually with learners to demonstrate and explain the material. Some tutorials will take place in a recording studio with digital and analogue processing equipment.

The lectures each week will combine lecture delivery and discussion on the material.

Each lecturer has a time allocated for one-to-one meetings with learners as required. These are not mandatory sessions but available either where the lecturer wishes to discuss an element of the module with a learner, or a learner requests a meeting to discuss a particular topic. These sessions focus on academic issues only.

## Module Content

### Multi-genre mixing techniques

- An understanding of key principles
- Clear analysis of sonic references
- In depth understanding of psychoacoustic principles and their effect on a mix
- Creative use of samples to reinforce elements

### Mixing tools

- An understanding of spatial imaging and gain structure
- Floating point versus Fixed point processing
- Effective use of EQ, compression, limiting and spatial effects
- Creative and musical uses of automation

### Mastering techniques

- An understanding of industry standard metering requirements
- Effective use of mid-side processing techniques
- Clear understanding of loudness versus dynamic range
- Key practitioners & seminal works

### Deliverable formats for music

- An understanding of technical requirements for delivering to specific formats and platforms
- Ability to encode ISRC codes within each format
- Correct handling of Metadata
- Clear understanding of archival requirements

## 6.20.6 Module Teaching and Learning Strategy

Learners are taught using a combination of lectures and practical tutorials.

Tutorials are will take place in recording studios and practical labs and are used to develop the learner's proficiency in mixing and mastering and enabling analysis of material in an industry environment.

In addition, learners will be required to do a large portion of practical work outside of timetabled hours.

Activity	Teaching / Learning Strategy	Learning Environment
<b>Lecture (48 hours)</b>	Lectures / participative discussions / case studies and audio examples of advanced mixing and mastering / practical demonstrations of mixing and mastering techniques / analysis of hardware and software tools	College
<b>Tutorial (24 hours)</b>	Practice and training on hardware and software mixing and mastering tools and techniques / guided mixing and mastering studio sessions / practical application of techniques	College / Mac lab
<b>Assignment (96 hours)</b>	Practice learning and perfecting mixing and mastering skills	College
<b>Independent Work (82 hours)</b>	Directed and self-directed learning / home study / practice in college studio spaces	College / Home

### 6.20.7 Timetabling, Learner Effort and Credit

The module is timetabled as one 3-hour session to the whole class. This will consist of the 2-hour lecture, and a 1-hour studio or lab tutorial.

The number of credits assigned to this module is our assessment of the learner effort required. It is our view that 10 ECTS of learner effort is required by learners coming new to the material to achieve the learning outcomes required.

### 6.20.8 Work-based Learning and Practice-placement

There is no work based learning or practical placement involved in the module.

### 6.20.9 E-Learning

The College VLE is used to disseminate notes, advice and online resources to support the learners. The learners are also given access to Lynda.com as a resource for reference.

### 6.20.10 Module Physical Resource Requirements

Requirements are for a fully equipped lecture hall and access to one or more recording studios. In the recording studios, there should be an analogue and digital processing equipment. Industry standard monitoring will be required for each studio for analysis of material.

### 6.20.11 Reading Lists and Other Learning Materials

#### Recommended Reading

- Izhaki, R. (2011) *Mixing audio: concepts, practices and tools*. Oxford; Focal Press.  
Katz, B. (2014) *Mastering audio*. Oxford: Focal Press.  
Senior, M. (2011) *Mixing secrets for the small studio*. Oxford: Focal Press.  
Owsinski, B. (2013) *The Mixing engineer's handbook*. Boston MA: Cengage Learning  
Owsinksi, B. (2011) *Audio mixing bootcamp*. Lynda.com  
Savage, S. (2014) *Mixing and mastering in the box: the guide to making great mixes and final masters on your computer*. Oxford: OUP.

### Secondary Reading

Gibson, D. (2005) *The art of mixing: a visual guide to recording, engineering, and production*. Boston, MA: Thomson Course Technology.

Cousins, M. (2013) *Practical mastering: a guide to mastering in the modern studio*, Oxford: Focal Press

Wadell, G. (2013) *Complete audio mastering: practical techniques*. New York: McGraw-Hill

Wyner, J. (2013) *Audio mastering: essential practices*. Boston MA: Berklee Press.

Fisher, C. (2015) *Advanced EDM Mixing Principles*. Lynda.com

Lee White, B. (2012) *Mixing a Rock Song in Pro Tools*. Lynda.com

Oswinski, B (2013) *Audio Mastering Techniques*. Lynda.com

Oswinski, B (2012) *Mastering for iTunes*. Lynda.com

### 6.20.12 Specifications of Module Staffing Requirements

For each instance of the module, there will be one lecturer qualified to at least Master's level in Sound Engineering or equivalent, and with a relevant third level teaching qualification (e.g. Certificate in Training and Education). Depending on numbers a lab assistant may be required. Where this is the case the Assistant will be required to have a sound understanding of music technology and computer based workstations, either through industry experience or academic qualification. For example, a postgraduate student of Audio and Music Production may be suitable to assist the lecturer in lab sessions. Any lab assistant will work under the supervision of the lecturer and to agreed worksheets

### 6.20.13 Module Summative Assessment Strategy

Name	Weighting	Description	Learning Outcomes
Practical Project	30%	Learners will be provided with a multi-track session file. They will then be required to do a 'Professional' standard mix demonstrating clear analysis of reference material and creative use of mixing techniques.	18.1 – 18.3
Assignment	40%	For this assignment learners, will mix a minimum of 4 songs/pieces from an E.P or album project. They must demonstrate professional standard mixes and maintain continuity and cohesiveness across the project. Each song, while individual should sound like it belongs on the same record as the others.	18.1 - 18.2
Continuous assessment	10%	Using the songs/pieces, learners will be required to attend formative assessment meetings to monitor progression of the project through stages.	18.1 – 18.4
Assignment	20%	Compilation Album Master demonstrating advanced mastering techniques with focus on overall tone, track order, gap length and overall sonic quality.	18.2 – 18.4

## 6.20.14 Sample Assessment Materials

### Assessment 1: Mixing.

For this assignment, you will be provided with a multi-track session of a piece of music by your tutor.

You must then take this project and perform a 'professional' standard mix to the song. You may mix the song to your own taste. There are no specific requirements for elements to include. Be creative.

During the project, you will be expected to bring in the project as it evolves through stages. You will then have the opportunity to present the mix for peer review and feedback from your tutor. You should have clear ideas as to the reference material and your goals for the piece. I.e. Have reference pieces of styles, genres, sounds you are using as inspiration for your mix.

The song should be mixed to a professional standard, e.g., it should not sound out of place on radio or on a streaming service like Spotify.

**Submit:**

- 1 x DAW project file of final mix**
- 1 x stereo wav file of final mix (24 bit 48KHz, .WAV)**
- 1 x technical log (Microsoft Word Document) documenting the working processes employed, a critical reflection on the processes and an evaluation and critique of the completed work**



### **Assessment 2: Mixing an E.P/Album**

For this assignment, you may choose your own pieces of music (must be negotiated with tutor). These can be previously recorded pieces, or new recordings can be made.

Then, like Assignment 1, you must mix each song to a professional standard

You may mix the songs to your own taste. There are no specific requirements for elements to include. Be creative. While each mix should have its own individual considerations, you should also consider the project as a whole. Each song should sound like it belongs with the others. There should be a sonic signature the whole record.

During the project, you will be expected to bring in the songs as they evolve through stages. You will then have the opportunity to present the mixes for peer review and feedback from your tutor. You should have clear ideas as to the reference material and your goals for the piece. I.e. Have reference pieces of styles, genres, sounds you are using as inspiration for your mix.

The song should be mixed to a professional standard, e.g., it should not sound out of place on radio or on a streaming service like Spotify.

**Submit:**

- 1 x DAW project file per song.**
- 1 x stereo wav file per mix (24 bit 48KHz, .WAV)**
- 1 x technical log (Microsoft Word Document) documenting the working processes employed, a critical reflection on the processes and an evaluation and critique of the completed work.**

### **Assessment 3: Mastering.**

Using the material from assignment 2, you are required to 'Master' each piece of the project to produce a final master copy of the album/E.P.

This album should be mastered to industry standards for CD, and digital streaming service.

You should include details on reference levels used for each format.

**Submit: 1 x DAW project file of Mastering project**

- 1 x Mastered CD of album/E.P. (Adhering to Redbook Standard)**
- 1 x digital master file (per mix) for streaming/digital download.**
- 1 x technical log (Microsoft Word Document) documenting the working processes employed, a critical reflection on the processes and an evaluation and critique of the completed work**

## 6.21 Module 21: Professional Practice

<b>Module Title</b>	Professional Practice
<b>Module NFQ Level (only if an NFQ level can be demonstrated)</b>	8
<b>Module number/Reference</b>	BAAMT303
<b>Parent Programme</b>	BA (Hons) in Music Production
<b>Stage of Parent Programme</b>	3
<b>Semester</b>	1
<b>Module Credit Units (FET/HET/ECTS)</b>	ECTS
<b>Module Credit number of Units</b>	5
<b>List the teaching and learning modes</b>	FT
<b>Entry requirements (statement of knowledge, skill and competence)</b>	Learner has earned Level 5 qualification. No previous applications technology ability is required.
<b>Pre-requisite module titles</b>	None
<b>Co-requisite module titles</b>	None
<b>Is this a capstone module? (Yes or No)</b>	No
<b>Staff qualifications (academic, pedagogical and professional/occupational) and experience required. (staff includes workplace personnel who are responsible for learners such as apprentices, trainees and learners in clinical placements)</b>	Staff are required to have at least a Masters qualification in a business related discipline in addition to Industry experience. Staff are expected to have the Certificate in Training and Education qualification from Griffith College or its equivalent.
<b>Staff/learner ratio per centre (or instance of the module)</b>	For lecture load, ratio of 1:50 lecturer to learner is required and in lab sessions the maximum allowed is 1:25 The lecturer will also have 1 hour per week set aside in their timetable for 1:1 contact with learners who require it or have particular items they want to discuss.
<b>Maximum number of learners per centre (or instance of the module)</b>	50
<b>Duration of the Module</b>	One Academic Semesters, 12 weeks teaching
<b>Average (over the duration of the module) of the contact hours per week.</b>	3
<b>Physical resources and support required per centre (or instance of the module)</b>	One lecture hall with capacity at least 50 and one computer lab with capacity of 25.

Analysis of Required Learning Effort								
Effort while in contact with staff								
Classroom and Demonstrations	Mentoring and small group tutoring	Other (Specify)		Directed e-learning (hours)	Independent learning (hours)	Other hours (specify)	Work-based learning hours of learning effort	Total Effort (hours)
		Hours	Minimum ratio teacher/learner					
24	1:50	12	1:25		89			125
Allocation of marks (within the module)								
				Continuous Assessment	Supervised Project(s)	Proctored practical	Proctored Written Examination	Total
Percentage contribution					90%		60%	100%

### 6.21.1 Module Objectives

This module aims to provide the learner with the skills necessary to provide a business service to the creative industries. The learner is equipped with a working knowledge of the ethical and fiscal standards of the professional bodies and the practical understanding of the complex legal implications of intellectual property in the music industry. The module aims to develop the learners' presentation, CV, and job application skills as well as their marketing and selling skills on the internet.

### 6.21.2 Minimum Intended Module Learning Outcomes

On successful completion of this module the learner will be able to:

- MLO 21.1 Set up and manage a small business in accordance with legalities such as tax, business registration and insurance.
- MLO 21.2 Navigate the legalities of recording rights, arrangement rights, copyright, intellectual property etc.
- MLO 21.3 Develop successful strategies for project pitching and presentation to third parties.
- MLO 21.4 Organise promotion of a small business through website design and internet marketing.

### 6.21.3 Rationale for inclusion of the module in the programme and its contribution to the overall IPLOs.

As an audio professional, working in a commercial environment, it is important to know your legal rights and ensure they are adhered to. An individual involved at any stage of the creative process, whether that's writing or arranging, may be entitled to royalties on sales/distribution of the product. As well as the legal issues, any individual setting up a business must conform to statutory requirements, i.e., tax compliance, company registration etc. This module will inform the learner of these issues as well as developing the skill to promote themselves and/or their business. This module will contribute to the learning required for Programme Learning Outcome 11 while also contributing to outcomes 8 and 9.

### 6.21.4 Information Provided to Learners about the Module

Learners enrolled on this module will receive a copy of the module descriptor and assignment briefs, including an outline of the criteria for assessment.

Previous examples of assignments are also presented to the class.

### 6.21.5 Module Content, Organisation and Structure

The module is organised to deliver theory through lectures (2 Hours) and supervised tutorials (1 Hour). During tutorials, each learner will have a workstation allowing the lecturer to work individually with learners to demonstrate and explain the material.

The lectures each week will combine lecture delivery and discussion on the material.

Each lecturer has a time allocated for one-to-one meetings with learners as required. These are not mandatory sessions but available either where the lecturer wishes to discuss an element of the module with a learner, or a learner requests a meeting to discuss a particular topic. These sessions focus on academic issues only.

## Module Content

### Setting up and running a small business

- Registration.
- Taxation and accounting.
- Personnel management.
- Finances and fiscal obligations.
- Overheads and expenditure considerations.

### Online business systems

- Models for business websites.
- Music catalogues.
- Revenue streams.

### Copyright

- Intellectual property.
- Arrangement rights.
- Recording rights.
- Performance rights.
- Royalties.

### Project pitching

- CV preparation.
- Media formats.
- The NLP language of the “sell”.

### Presentation skills

- Presentation structures and platforms.
- Portfolio presentation.

### 6.21.6 Module Teaching and Learning Strategy

Learners are taught using a combination of lectures and tutorials.

During tutorials, each learner will have a workstation/exercise allowing the lecturer to work individually with learners to demonstrate and explain the material.

Activity	Teaching / Learning Strategy	Learning Environment
<b>Lecture (24 hours)</b>	Lectures / participative discussions / case studies of business processes and practices	College
<b>Tutorial (12 hours)</b>	Support and feedback for module assignments / guidance with academic writing / preparation for commercial practice	College
<b>Assignment (48 hours)</b>	Practice learning and perfecting professional practice skills	College
<b>Independent Work (41 hours)</b>	Directed and self-directed learning / home study	College / Home

### 6.21.7 Timetabling, Learner Effort and Credit

The module is timetabled as one 3-hour session to the whole class. This will consist of a 2-hour lecture, and a 1-hour studio or lab tutorial.

The number of credits assigned to this module is our assessment of the learner effort required. It is our view that 10 ECTS of learner effort is required by learners coming new to the material to achieve the learning outcomes required.

### 6.21.8 Work-based Learning and Practice-placement

There is no work based learning or practical placement involved in the module.

### 6.21.9 E-Learning

The College VLE is used to disseminate notes, advice and online resources to support the learners. The learners are also given access to Lynda.com as a resource for reference.

### 6.21.10 Module Physical Resource Requirements

Requirements are for a fully equipped lecture hall and access to one or more recording studios. In the recording studios, there should be an analogue and digital processing equipment. Industry standard monitoring will be required for each studio for analysis of material.

### 6.21.11 Reading Lists and Other Learning Materials

#### Recommended Reading

Halloran, M. (2008) *The musician's business and legal guide*. Upper Saddle River NJ: Pearson Prentice Hall.

Knabb, C. [et al] (2013) *Music is your business: the musician's Four Front strategy for success*. Seattle WA: FourFront.

O'Kane, B. (2010) *Starting a business in Ireland: a comprehensive guide and directory*, Cork: Oak Tree Press.

### Supplemental Reading

Avalon, M. (2016) *Confessions of a record producer: how to survive the scams and shams of the music business*. San Francisco: Backbeat Books.

Beauchamp, T. [et. Al.] (2013) *Ethical theory and business*, Upper Saddle River N.J.: Pearson/Prentice Hall.

Bethel, E. (2014) *Posters and presentations*. Houndsmills Basingstoke: Palgrave Macmillan.

Byrne, D. (2013) *How music works*. San Francisco: McSweeney's.

Carolan, E. (2010) *Media law in Ireland*. Dublin: Round Hall Sweet and Maxwell.

Duarte, N. (2009) *Slide:ology: the art and science of creating great presentations*. Sebastopol: O'Reilly.

Ess, C. (2013) *Digital media ethics*. Cambridge: Polity.

Figliulo, M. (2015) *Creating a Business Plan*. Lynda.com

Vrontikis, P. (2013) *Running a Design Business: Presentation Skills* Lynda.com

### 6.21.12 Specifications of Module Staffing Requirements

For each instance of the module, there will be one lecturer qualified to at least Master's level in Business or equivalent, and with a relevant third level teaching qualification (e.g. Certificate in Training and Education). Depending on numbers a lab assistant may be required. Where this is the case the Assistant will be required to have a sound understanding of music technology and computer based workstations, either through industry experience or academic qualification. For example, a postgraduate student of Audio and Music Production may be suitable to assist the lecturer in lab sessions. Any lab assistant will work under the supervision of the lecturer.

### 6.21.13 Module Summative Assessment Strategy

Name	Weight	Description	Learning Outcomes
Assignment and Presentation	40%	Document and presentation evidencing implementation of practical aspects of module in a professional context. This is a marketing strategy	19.3 – 19.4
Report	60%	Assess learner's assimilation and understanding of the material covered. A Business Plan. As part of the plan, learners will be required to attend scheduled meetings with a tutor for feedback. This will contribute to a continuous assessment element.	19.1-19.2

## 6.21.14 Sample Assessment Materials

### Assessment 1

#### Marketing Presentation

You are to develop, plan and present a music marketing campaign. The campaign could for example focus on the promotion of a musical product, or an individual artist or collective. The specific nature of the presentation will be negotiated through the tutorial process.

**Presentations will typically focus on:**

- The specific aspects of your product and or artist, and include examples of their work
- The intended target audience and relevant demographic
- A tailored marketing campaign
- The USP of your product
- A visual identity

The presentation must be between eight and ten minutes in duration. You will be given a one - minute warning at nine minutes and asked to stop if your presentation reaches ten minutes. The presentation must make full use of software presentation resources to present audio, music, text, design, graphics, photography and video.

The presentation must be rehearsed with the materials/resources you intend to use and an appropriate balance between examples and your delivery must be applied.



## 6.22 Module 22: Studio Design and Setup

<b>Module Title</b>	Studio Design and Setup
<b>Module NFQ Level (only if an NFQ level can be demonstrated)</b>	8
<b>Module number/Reference</b>	BAAMT304
<b>Parent Programme</b>	BA (HONS) Audio and Music Technology
<b>Stage of Parent Programme</b>	3
<b>Semester</b>	2
<b>Module Credit Units (FET/HET/ECTS)</b>	ECTS
<b>Module Credit number of Units</b>	5
<b>List the teaching and learning modes</b>	FT
<b>Entry requirements (statement of knowledge, skill and competence)</b>	Learner has earned Level 5 qualification. No previous applications technology ability is required.
<b>Pre-requisite module titles</b>	None
<b>Co-requisite module titles</b>	None
<b>Is this a capstone module? (Yes or No)</b>	No
<b>Staff qualifications (academic, pedagogical and professional/occupational) and experience required. (staff includes workplace personnel who are responsible for learners such as apprentices, trainees and learners in clinical placements)</b>	Staff are required to have at least a Master's qualification in Audio and Music Technology or related discipline. Industry experience would be a benefit but is not a requirement. Staff are expected to have the Certificate in Training and Education qualification from Griffith College or its equivalent.
<b>Staff/learner ratio per centre (or instance of the module)</b>	For lecture load, ratio of 1:50 lecturer to learner is required and in lab sessions the maximum allowed is 1:25 The lecturer will also have 1 hour per week set aside in their timetable for 1:1 contact with learners who require it or have particular items they want to discuss.
<b>Maximum number of learners per centre (or instance of the module)</b>	50
<b>Duration of the Module</b>	One Academic Semester, 12 weeks teaching
<b>Average (over the duration of the module) of the contact hours per week.</b>	3
<b>Physical resources and support required per centre (or instance of the module)</b>	One lecture hall with capacity at least 50 and one computer lab with capacity of 25.

Analysis of Required Learning Effort								
Effort while in contact with staff								
Classroom and Demonstrations	Mentoring and small group tutoring	Other (Specify)		Directed e-learning (hours)	Independent learning (hours)	Other hours (specify)	Work-based learning hours of learning effort	Total Effort (hours)
		Hours	Minimum ratio teacher/learner					
24	1:50	12	1:25		89			125
Allocation of marks (within the module)								
				Continuous Assessment	Supervised Project(s)	Proctored practical	Proctored Written Examination	Total
Percentage contribution					100%			100%

### 6.22.1 Module Aims and Objectives

The module aims to provide practical and theoretical knowledge in the main areas of studio design and installation. The learner will become familiar with various systems and operations using industry software currently used in acoustic analysis. Learners are provided with the knowledge to design, and correctly identify the positioning necessary for bass traps, baffles, acoustic absorption and diffusers.

### **6.22.2 Minimum Intended Module Learning Outcomes.**

On successful completion of this module, the learner will be able to:

- MLO 22.1 Analyse and critique the acoustics of a room.
- MLO 22.2 Evaluate the design and use of acoustic modifiers.
- MLO 22.3 Assess and evaluate a broad range of acoustic principles.
- MLO 22.4 Use acoustical analysis to identify problems and propose solutions specifying appropriate monitoring equipment and setup suitable for the particular environment

### **6.22.3 Rationale for inclusion of the module in the programme and its contribution to the overall IPLOs.**

Professional audio is no longer confined to the purpose-built recording studios. Professionals set up studios in an array of environment these days. It could be a converted attic, a spare room in the home, or a shed, insulated and treated. This module will enable the learners to design and treat their own existing space to improve the acoustic properties of the room and allow for accurate production of sound/music. The learning here will help learners achieve Programme Learning Outcomes 1 and 8, while also contributing to learning outcome 4.

### **6.22.4 Information Provided to Learners about the Module**

Learners enrolled on this module will receive a copy of the module descriptor and assignment briefs, including an outline of the criteria for assessment. Previous examples of assignments are also presented to the class.

### **6.22.5 Module Content, Organisation and Structure**

The module is organised to deliver theory through lectures (2 Hours) and supervised tutorials (1 Hour). During tutorials, each learner will have a workstation allowing the lecturer to work individually with learners to demonstrate and explain the material. The lectures each week will combine lecture delivery and discussion on the material.

Each lecturer has a time allocated for one-to-one meetings with learners as required. These are not mandatory sessions but available either where the lecturer wishes to discuss an element of the module with a learner, or a learner requests a meeting to discuss a particular topic. These sessions focus on academic issues only.

## Module Content

### Room Acoustics

- An ability to set up an FFT and Spectrogram analyser
- An ability to carry out FFT and Spectrogram analysis correctly
- An understanding of the results of the FFT and Spectrogram
- An ability to identify the causes of irregularities or acoustic issues within the room

### Design and use of acoustic modifiers

- An understanding of the design and application of acoustic absorbers, Diffusers, Bass Traps, Baffles.
- An ability to identify the need for acoustic modifications, and design room solutions applying the use of acoustic modifiers.

### Acoustic principles

- An understanding of, reflection, absorption, diffusion.
- An understanding of standing waves, flutter echo, reverberation time, sound transmission,
- An understanding of designing and building acoustic panels and bass traps,
- An understanding of sound isolation

### Speaker setup

- An understanding of speaker alignment
- An understanding of tonal changes from room positioning
- An understanding of phase alignment of speakers

## 6.22.6 Module Teaching and Learning Strategy

Classes are used to explain the concepts, exemplify the techniques, and solve (in workshop style) a series of exercises and problems. Developing a learner's ability in acoustics and design requires constant reinforcement and so questions and problems are worked through both as tutorials and by the learner outside of direct contact hours. During tutorials, each learner will have a workstation/exercise allowing the lecturer to work individually with learners to demonstrate and explain the material.

Activity	Teaching / Learning Strategy	Learning Environment
Lecture (24 hours)	Lectures / participative discussions / case studies of studio spaces and studio design theory	College
Tutorial (12 hours)	Demonstrations of lecture theory in a studio environment / practice using studio design theory / practical demonstrations to link theory and practice	College / Studio
Assignment (48 hours)	Practice learning and perfecting studio design skills	College
Independent Work (41 hours)	Directed and self-directed learning / home study	College / Home

### 6.22.7 Timetabling, Learner Effort and Credit

The module is timetabled as one 3-hour session to the whole class. This will consist of the 2-hour lecture, and a 1-hour studio or lab tutorial.

The number of credits assigned to this module is our assessment of the amount of learner effort required. It is our view that 5 ECTS of learner effort is required by learners coming new to the material to achieve the learning outcomes required.

### 6.22.8 Work-based Learning and Practice-placement

There is no work based learning or practical placement involved in the module.

### 6.22.9 E-Learning

The College VLE is used to disseminate notes, advice and online resources to support the learners. The learners are also given access to Lynda.com as a resource for reference.

### 6.22.10 Module Physical Resource Requirements

Requirements are for a fully equipped lecture hall and access to one or more recording studios. In the recording studios, there should be an analogue and digital processing equipment. Industry standard monitoring will be required for each studio for analysis of material.

### 6.22.11 Reading Lists and Other Learning Materials

#### Recommended Reading

Everest, F.A. & Pohlmann, K.C. (2015) *Master handbook of Acoustics*. New York: Mc Graw-Hill.

Newell, P. (2011) *Recording studio design*. Oxford: Focal Press.

Rossing, T., Moore, R.F. & Wheeler, P.A. (2001) *The science of sound* Reading MA: Addison-Wesley.

#### Supplemental Reading

Beranek, L.L. & Mellow, T.T. (2012) *Acoustics: sound fields and transducers* Amsterdam: Elsevier

Long, M. (2014). *Architectural acoustics*. Amsterdam: Elsevier

Gallagher, M. (2006) *Acoustics for the home and project studio*. Boston MA: Thomson Course Technology PTR.

Blessner, B. & Salter, L.R. (2009) *Spaces speak, are you listening?: experiencing aural architecture*, Cambridge Mass.: MIT Press.

White, P. (2003) *Basic home studio design*, London: SMT.

### 6.22.12 Specifications of Module Staffing Requirements

For each instance of the module, there will be one lecturer qualified to at least Master's level in Acoustics or equivalent, and with a relevant third level teaching qualification (e.g. Certificate in Training and Education). Depending on numbers a lab assistant may be required. Where this is the case the Assistant will be required to have a sound understanding of music technology and computer based workstations, either through industry experience or academic qualification. For example, a postgraduate student of Audio and Music Production may be suitable to assist the lecturer in lab sessions. Any lab assistant will work under the supervision of the lecturer.

### 6.22.13 Module Summative Assessment Strategy

Assessment Element	Percentage Weighting	Description	Module Outcomes
Assignment	100%	Room measurement and analysis reporting issues. Learners are required to complete an acoustical survey of a room that with a view to the room becoming a recording/listening environment. Studio design and acoustic solution to improve the room. As part of the project, learners will be required to attend scheduled meetings with a tutor for feedback. This will contribute to a continuous assessment element.	20.1 – 20.5

### 6.22.14 Sample Assessment Materials

#### Studio Design: Assignment

For this assignment, you must analyse and design a space for use as a recording/listening environment.

You must complete the following:

#### Part 1: Acoustical survey and analysis. (50%)

1. Complete an acoustical survey of a room/space – to include an FFT and Spectrogram analysis
2. Based on your findings, identify any/all acoustical issues with the room.

#### Part 2: Acoustic Solution and Studio Design. (50%)

1. Design and equip the studio space.

Develop a plan to improve the acoustics of the room. Include detail on isolation, absorption, reflection and dispersion. Include a floor plan of the space identifying positioning of all acoustic treatment suggested for the room. Make sure to include detail on materials used for any/all treatments. A complete equipment list should also be included.

## 6.23 Module 23: Recording and Mixing 2

<b>Module Title</b>	Recording and Mixing 2
<b>Module NFQ Level (only if an NFQ level can be demonstrated)</b>	8
<b>Module number/Reference</b>	BAAMT305
<b>Parent Programme</b>	BA (HONS) Audio and Music Technology
<b>Stage of Parent Programme</b>	3
<b>Semester</b>	1 and 2
<b>Module Credit Units (FET/HET/ECTS)</b>	ECTS
<b>Module Credit number of Units</b>	10
<b>List the teaching and learning modes</b>	FT
<b>Entry requirements (statement of knowledge, skill and competence)</b>	Learner has earned Level 5 qualification. No previous applications technology ability is required.
<b>Pre-requisite module titles</b>	None
<b>Co-requisite module titles</b>	None
<b>Is this a capstone module? (Yes or No)</b>	No
<b>Staff qualifications (academic, pedagogical and professional/occupational) and experience required. (staff includes workplace personnel who are responsible for learners such as apprentices, trainees and learners in clinical placements)</b>	Staff are required to have at least a Master's qualification in Audio and Music Technology or related discipline. Industry experience would be a benefit but is not a requirement. Staff are expected to have the Certificate in Training and Education qualification from Griffith College or its equivalent.
<b>Staff/learner ratio per centre (or instance of the module)</b>	For lecture load, ratio of 1:50 lecturer to learner is required and in lab sessions the maximum allowed is 1:25 The lecturer will also have 1 hour per week set aside in their timetable for 1:1 contact with learners who require it or have particular items they want to discuss.
<b>Maximum number of learners per centre (or instance of the module)</b>	50
<b>Duration of the Module</b>	Two Academic Semesters, 24 weeks teaching
<b>Average (over the duration of the module) of the contact hours per week.</b>	3
<b>Physical resources and support required per centre (or instance of the module)</b>	One lecture hall with capacity at least 50 and one computer lab with capacity of 25.

Analysis of Required Learning Effort								
Effort while in contact with staff								
Classroom and Demonstrations	Mentoring and small group tutoring	Other (Specify)		Directed e-learning (hours)	Independent learning (hours)	Other hours (specify)	Work-based learning hours of learning effort	Total Effort (hours)
		Hours	Minimum ratio teacher/learner					
48	1:50	24	1:25		178			250
Allocation of marks (within the module)								
				Continuous Assessment	Supervised Project(s)	Proctored practical	Proctored Written Examination	Total
Percentage contribution				10%	70%	20%		100%

### 6.23.1 Module Objectives

This module aims to advance a range of skills required to make an effective producer. This involves developing recording skills to a professional industry standard including pre and post-production elements, recording large acoustic ensembles, and the use of virtual instruments and sound manipulation. The module enables the learner to manage both technical and interpersonal communications in a studio environment with an orchestra or large ensemble, and develops communication skills required to liaise with clients.



### 6.23.2 Minimum Intended Module Learning Outcomes

On successful completion of this module the learner will be able to:

- MLO 23.1      Manage a substantial music based recording and production to professional industry standards.
- MLO 23.2      Manage the modern multi-studio, cross-platform workflow of a project smoothly from pre-production to final master.
- MLO 23.3      Record ensembles in a studio to a professional standard.
- MLO 23.4      Produce an integrated structured recording from a variety of different source materials.

### 6.23.3 Rationale for inclusion of the module in the programme and its contribution to the overall IPLOs

This module is very much the culmination of the learners' recording and production skills. In this module Learners, will get to grips with large acoustic ensembles. They will be fully involved in the recording techniques and workflows of the large recording sessions. The industry now is leaning largely to full, live band setups in studios, with performances being made often as online content and for promotional material. In Windmill Lane Studios, we are seeing a large amount of these sessions. Learners will be working with clients outside of the studio to pre-produce, plan and realise a full recording session of an album project. The learning in this module will contribute to learner's achievement of Programme Learning Outcomes 6 and 9 while also contributing to Outcomes 8, 11 and 12.

### 6.23.4 Information Provided to Learners about the Module

Learners enrolled on this module will receive a copy of the module descriptor and assignment briefs, including an outline of the criteria for assessment. Previous examples of assignments are also presented to the class.

### 6.23.5 Module Content, Organisation and Structure

The module is organised to deliver theory through lectures (2 Hours) and supervised tutorials (1 Hour). During tutorials, each learner will have a workstation allowing the lecturer to work individually with learners to demonstrate and explain the material. Some tutorials will take place in a recording studio demonstrating large group recording techniques. The lectures each week will combine lecture delivery and discussion on the material.

Each lecturer has a time allocated for one-to-one meetings with learners as required. These are not mandatory sessions but available either where the lecturer wishes to discuss an element of the module with a learner, or a learner requests a meeting to discuss a particular topic. These sessions focus on academic issues only.

## Module Content

### Recording studio techniques for acoustic ensembles

- The Orchestra.
- Strings.
- Brass.
- Percussion.
- Woodwind.
- Solo instruments.
- Choir.

### Formative lab-work and tutorials focus on the completion of learner assignments

- The architecture of a creative workflow.
- Creating a conducive recording and working environment.
- Producer as musician and arranger.
- Advanced virtual instrument technologies.
- Advanced effect and sound manipulation technologies.
- The synthesis of musical and technical ideas.

### Lectures will develop more general production skills

- Budgeting for projects.
- Case studies of the producer/ artist dynamic.
- Visiting lecturers providing real world advice from the producer/engineer environment.
- Group analysis of learner work and of industry examples.

### 6.23.6 Module Teaching and Learning Strategy

Learners are taught using a combination of lectures and practical tutorials. Tutorials are will take place in recording studios and practical labs and are used to develop the learner's proficiency in ensemble recording. Allowing demonstration and practice of room acoustics, instrument positioning and mic choice and placement.

In addition, learners will be required to do a large portion of practical work outside of timetabled hours.

Activity	Teaching / Learning Strategy	Learning Environment
Lecture (48 hours)	Lectures / participative discussions / case studies of advanced mixing and recording / demonstrations of instruments and recording techniques	College
Seminar (24 hours)	Seminars with industry producers and engineer providing additional perspectives and insights / editing suite, recording studio and computer lab seminars for in-depth training	College / Studio / Mac lab
Assignment (96 hours)	Practice learning and perfecting recording and mixing skills	College
Independent Work (82 hours)	Directed and self-directed learning / home study / practice in college studio spaces	College / Home

### 6.23.7 Timetabling, Learner Effort and Credit

The module is timetabled using one 3-hour session per week to the whole class. This will consist of a 2-hour lecture, and a 1-hour studio or lab tutorial.

The number of credits assigned to this module is our assessment of the learner effort required. It is our view that 10 ECTS of learner effort is required by learners coming new to the material to achieve the learning outcomes required.

### 6.23.8 Work-based Learning and Practice-placement

There is no work based learning or practical placement involved in the module.

### 6.23.9 E-Learning

The College VLE is used to disseminate notes, advice and online resources to support the learners. The learners are also given access to Lynda.com as a resource for reference.

### 6.23.10 Module Physical Resource Requirements

Requirements are for a fully equipped lecture hall and access to one or more recording studios. The recording studio should be capable of managing multi-instrument, musician, ensemble recordings. Variable room acoustics and broad range of microphones should be available to the learner for demonstration and practice.

### 6.23.11 Reading Lists and Other Learning Materials

#### Recommended Reading

- Katz, B. (2014) *Mastering audio: the art and the science*. Oxford: Focal Press.  
Owsinski, B. (2013) *The recording engineer's handbook*. Boston MA: Course Technology.  
Owsinski, B. (2013) *The Mixing engineer's handbook*. Boston MA: Cengage Learning.  
Owsinski, B. (2016) *Audio mixing masterclass*. Lynda.com

#### Secondary reading

- Beinhorn, M. (2015) *Unlocking creativity: a producer's guide to making music and art*. Milwaukee WI: Hal Leonard.  
Crane, L. & Visconti, T. (2001) *Tape op: the book about creative music recording*. Venice CA: Feral House.  
Crane, L. (2009) *Tape op the book about creative music recording, Vol. 2*. Venice CA: Feral House.  
Crane, L. (2013) *Music production secrets: Larry Crane on mixing*. Lynda.com  
Hewitt, R. (2015) *Drum setup and Mic'ing in the studio*. Lynda.com  
Hewitt, R. (2015) *Drum mixing techniques. Drum mixing techniques*. Lynda.com  
Massey, H. (2000) *Behind the glass: top record producers tell how they craft the hits*. San Francisco: Backbeat Books.  
Massey, H. (2009) *Behind the glass Volume II: top record producers tell how they craft the hits*. San Francisco: Backbeat Books.

### 6.23.12 Specifications of Module Staffing Requirements

For each instance of the module, there will be one lecturer qualified to at least Master's level in Sound Engineering or equivalent, and with a relevant third level teaching qualification (e.g. Certificate in Training and Education). Depending on numbers a lab assistant may be required. Where this is the case the Assistant will be required to have a sound understanding of music technology and computer based workstations, either through industry experience or academic qualification. For example, a postgraduate student of Audio and Music Production may be suitable to assist the lecturer in lab sessions. Any lab assistant will work under the supervision of the lecturer.

### 6.23.13 Module Summative Assessment Strategy

Name	Weight	Description	Learning Outcomes
Practical	20%	Learners will undergo a large format studio Practical Exam. In this they will be examined on, studio setup, signal flow, DAW management, Patch bay, Client communications, multi-channel headphones systems, Automation setup and grouping, mix-down process.	21.1, 21.2, 21.4
Assignment	30%	Live recording – learners will produce a recording of a large ensemble, or large band. No overdubs are allowed. Learners will pay attention to isolation, clarity, spill management, line of sight.	21.2
Assignment	40%	Client E.P. Learners will source and work with a client to produce an E.P project (minimum 4 songs).	21.1 – 21.4
Continuous assessment	10%	Using the E.P., learners will be required to attend formative assessment meetings to monitor progression of the project through stages.	21.1 – 21.4

### 6.23.14 Sample Assessment materials

#### Assessment 1: Studio 'Driving test' Examination

Each participant will undergo a practical exam in a professional studio environment. During the exam, each participant will be required to fulfil a range of tasks set by the instructor in the studio. These should include:

- setup of a large format console
- Patching of outboard equipment and effects
- Utilizing multi-channel personnel headphone system
- Channel grouping
- Studio Loudspeaker patching

Once complete, participants will be provided with a previously recorded multi-track session for which they will configure for automation on the console software. Each will then be required to perform several passes of automation to build a 'mix'. The mix must then be re-recorded onto a stereo recording system, and the automation saved.

Participants will also be expected to employ appropriate trouble shooting techniques to eliminate any problems during the process. Particular attention will be paid to time management and communication throughout the process.

**Assessment 2: Recording - Live**

Participants will be required to produce a 'live' recording. E.g., orchestral ensemble or large band.

The piece(s) must be performed as one recording in the studio. A multi-track recording will be made of each instrument using mono, and stereo recording. Room recording should also be carefully considered. Overdubs are not permitted, all elements must be recorded simultaneously

Once complete, a stereo wav file, will be submitted, as well as documentation detailing the recording process with respect to technique and separation in the studio environment.

**Assessment 3: Client E.P project**

Participants are asked to source a client, on negotiation with tutor; and record an E.P / album with the client. Participants will manage this project from rehearsal/pre-production stage, through to finished mixes.

## 6.24 Module 24: Audio Post Production Techniques

<b>Module Title</b>	Audio Post Production techniques
<b>Module NFQ Level (only if an NFQ level can be demonstrated)</b>	8
<b>Module number/Reference</b>	BAAMT306
<b>Parent Programme</b>	BA (Hons) in Audio and Music Technology
<b>Stage of Parent Programme</b>	3
<b>Semester</b>	1
<b>Module Credit Units (FET/HET/ECTS)</b>	ECTS
<b>Module Credit number of Units</b>	5
<b>List the teaching and learning modes</b>	FT
<b>Entry requirements (statement of knowledge, skill and competence)</b>	Learner has earned Level 5 qualification. No previous experience is required
<b>Pre-requisite module titles</b>	None
<b>Co-requisite module titles</b>	None
<b>Is this a capstone module? (Yes or No)</b>	No
<b>Staff qualifications (academic, pedagogical and professional/occupational) and experience required. (staff includes workplace personnel who are responsible for learners such as apprentices, trainees and learners in clinical placements)</b>	Staff are required to have at least a Master's qualification in Audio and Music Technology or related discipline. Industry experience would be a benefit but is not a requirement. Staff are expected to have the Certificate in Training and Education qualification from Griffith College or its equivalent.
<b>Staff/learner ratio per centre (or instance of the module)</b>	For lecture load, ratio of 1:50 lecturer to learner is required and in lab sessions the maximum allowed is 1:25 The lecturer will also have 1 hour per week set aside in their timetable for 1:1 contact with learners who require it or have particular items they want to discuss.
<b>Maximum number of learners per centre (or instance of the module)</b>	50
<b>Duration of the Module</b>	One Academic Semester, 12 weeks teaching
<b>Average (over the duration of the module) of the contact hours per week.</b>	3
<b>Physical resources and support required per centre (or instance of the module)</b>	One lecture hall with capacity at least 50 and one practical lab with PA system.

Analysis of Required Learning Effort									
Effort while in contact with staff									
Classroom and Demonstrations	Mentoring and small group tutoring		Other (Specify)		Directed e-learning (hours)	Independent learning (hours)	Other hours (specify)	Work-based learning hours of <small>learner effort</small>	Total Effort (hours)
	Hours	Minimum ratio teacher/learner	Hours	Minimum ratio teacher/learner					
24	1:50	12	1:25			89			125
Allocation of marks (within the module)									
					Continuous Assessment	Supervised Project(s)	Proctored practical	Proctored Written Examination	Total
Percentage contribution						100%			100%

### 6.24.1 Module Aims and Objectives

This module aims to develop learner's ability to work in the field of Audio Post Production for Film and Television. Learners will develop their knowledge of industry standard Post Production workflows including session interchange, audio and video synchronization and extended deliverables. Learners will explore editing workflows, noise reduction techniques, ambience matching, advanced routing and industry mixing and metering standards for stereo and surround formats. Learners will also explore different roles within the industry.

### 6.24.2 Minimum Intended Module Learning Outcomes

On successful completion of this module the learner will:

- MLO 24.1 Identify, analyse and apply advanced audio and video synchronization techniques.
- MLO 24.2 Identify, analyse and apply advanced editing, routing and mixing techniques using industry standard DAWs.
- MLO 24.3 Identify, analyse and apply software based Noise Reduction techniques to restore and enhance existing recordings.
- MLO 24.4 Initiate and plan projects involving the comprehensive use of surround sound formats and their effective application in Film and TV.

### 6.24.3 Rationale for inclusion of the module in the programme and its contribution to the overall IPLOs

This module will focus the learner's skills into the world of Audio Post Production. With the expanding film and games industries in Ireland, this is a vital skill for any audio professional and will serve to broaden the disciplines learners are skilled in. The learning in this module will contribute to Programme Learning Outcome 1 and 12, while also contributing to Outcomes 9 and 11.

### 6.24.4 Information Provided to Learners about the Module

Learners enrolled on this module will receive a copy of the module descriptor and assignment briefs, including an outline of the criteria for assessment.

Previous examples of assignments are also presented to the class.

### 6.24.5 Module Content, Organisation and Structure

The module is organised to deliver theory through lectures (2 Hours) and supervised tutorials (1 Hour). During tutorials, each learner will have a workstation allowing the lecturer to work individually with learners to demonstrate and explain the material. Some tutorials will take place in a surround sound recording studio techniques.

The lectures each week will combine lecture delivery and discussion on the material.

Each lecturer has a time allocated for one-to-one meetings with learners as required. These are not mandatory sessions but available either where the lecturer wishes to discuss an element of the module with a learner, or a learner requests a meeting to discuss a particular topic. These sessions focus on academic issues only.



## Module Content

### Audio and video synchronization techniques

- An understanding of key principles.
- Technical definitions and specifications.
- Ability to set up and synchronize audio to video.

### Editing, routing and mixing techniques within industry standard DAWs

- An understanding of Post Production editing terminology and workflows.
- Correct use of busses when sub-mixing and stemming.
- Real-Time Automation techniques using control surfaces.
- An understanding of industry standard metering requirements.

### Noise Reductions techniques

- Broadband noise reduction.
- Spectral analysis and repair.
- EQ and Ambience matching.

### Surround Sound formats for Film and TV

- An understanding of technical requirements for mixing in surround.
- Surround routing within DAW.
- Correct use of Surround plug ins and tools.
- Key practitioners & seminal works.

## 6.24.6 Module Teaching and Learning Strategy

This module is delivered through a combination of lectures, tutorials. The emphasis is on developing skills and understanding workflows used in Audio Post Production. These skills need to be applied in a systematic way, so learners will be encouraged to carry out additional work, outside of classes and tutorials as often as possible.

In addition to classes, learners will need to put in at least four hours of study and homework each week.

Activity	Teaching / Learning Strategy	Learning Environment
Lecture (48 hours)	Lectures / participative discussions / case studies and examples of post-production workflows / practical demonstrations of techniques / analysis of seminal works and practitioners	College
Tutorial (24 hours)	Practice and training on post production tools and techniques / guided recording and mixing studio sessions / practical application of techniques	College / Mac lab
Assignment (96 hours)	Practice learning and perfecting recording, editing, mixing techniques.	College
Independent Work (82 hours)	Directed and self-directed learning / home study / practice in college studio spaces	College / Home

### 6.24.7 Timetabling, Learner Effort and Credit

The module is timetabled using one 3-hour session per week to the whole class, this will generally consist of one 2-hour lecture and one 1-hour tutorial demonstrating the material.

The number of credits assigned to this module is our assessment of the amount of learner effort required. It is our view that 5 ECTS of learner effort is required by learners coming new to the material to achieve the learning outcomes required.

### 6.24.8 Work-based Learning and Practice-placement

There is no work based learning or practical placement involved in the module.

### 6.24.9 E-Learning

The College VLE is used to disseminate notes, advice and online resources to support the learners. The learners are also given access to Lynda.com as a resource for reference.

### 6.24.10 Module Physical Resource Requirements

Requirements are for a fully equipped lecture hall and access for each group to a computer lab. The software requirement is for an industry standard DAW with integrated video playback capabilities.

### 6.24.11 Reading lists and other Information Resources

#### Recommended Reading

- Holman, T. (2007) *Surround sound: up and running*. Oxford: Focal Press.  
Holman, T. (2010) *Sound for film and television*. Oxford: Focal Press.  
Krantz, J. (2015) *Pro Tools 11: advanced post production techniques*. Avid Learning  
Purcell, J. (2013) *Dialogue editing for motion pictures: a guide to the invisible art*. Oxford: Focal Press.  
Yewdell, D.L. (2011) *Practical art of motion picture sound*. Oxford: Focal Press.

#### Supplemental Reading

- Angel, E. (2016) *Video post-production for low-budget films*. Lynda.com  
Arment, V. (2014) *The foley grail: the art of performing sound for film, games and animation*. Oxford: Focal Press.  
Cross, M. (2013) *Audio post production for film and television*. Boston MA: Berklee Press.  
Hirsch, S. (2016) *Audio for video: production and post sound techniques*. Lynda.com  
Toole, F. (2008) *Sound reproduction: the acoustics and psychoacoustics of loudspeakers and rooms*. Oxford: Focal Press.  
Wyatt, H. and Amyes, T. (2013) *Audio post production for television and film: an introduction to technology and techniques*. Oxford: Focal Press.  
Hirsch, S. (2012) *Audio for Film and Video with Pro Tools*. Lynda.com  
Hirsch, S. (2015) *Repairing and Enhancing with iZotope RX 4*. Lynda.com

### 6.24.12 Specifications of Module Staffing Requirements

For each instance of the module, there will be one lecturer qualified to at least Master's level in Music Technology or equivalent and with a relevant third level teaching qualification (e.g. Certificate in Training and Education). Depending on numbers a lab assistant may be required. Where this is the case the assistant will be required to have a sound understanding of statistics and data analytics, either through industry experience or academic qualification. Any lab assistant will work under the supervision of the lecturer.

### 6.24.13 Module Assessment Strategy

Name	Description	Weighting	Learning Outcomes
Assignment	Editing of a picture and final stereo dub mix with focus on dialogue editing, ADR recording and noise reduction. A pre-mix must also be submitted	50%	22.1 – 22.3
Assignment	5.1 Surround Sound mix of a project with attention to system calibrations, DAW routing, surround automation, mix down and deliverables. As part of the project, learners will be required to attend scheduled meetings with a tutor for feedback. This will contribute to a continuous assessment element.	50%	22.2 – 22.4

### 6.24.14 Sample Assessment Materials

#### Assessment 1:

Participants will choose a scene/trailer from a live action movie. Each will be required to reproduce all audio aspects of the clip including, music soundtrack, dialog, sound effects and soundscapes.

Library music is not allowed for this piece. All music should be an original composition by the participant.

Each participant will submit a QuickTime movie of the clip with stereo audio. Project file and supporting documentation will also be submitted.

#### Assessment 2:

##### Surround Sound Mix.

For this project, participant will use the clip from assessment 1 above and produce a surround sound audio version of the same clip.

Each will be required to submit industry standard deliverables. I.e.

- 5.1/7.1 mix of final Dub
- Individual stems of Music, Dialog, and Effects.
- An M&E mix (stereo and surround)

## 6.25 Module 25: Sound Design for Games

<b>Module Title</b>	Sound Design for Games
<b>Module NFQ Level (only if an NFQ level can be demonstrated)</b>	8
<b>Module number/Reference</b>	BAAMT307
<b>Parent Programme</b>	BA (Hons) in Audio and Music Technology
<b>Stage of Parent Programme</b>	3
<b>Semester</b>	1
<b>Module Credit Units (FET/HET/ECTS)</b>	ECTS
<b>Module Credit number of Units</b>	5
<b>List the teaching and learning modes</b>	FT
<b>Entry requirements (statement of knowledge, skill and competence)</b>	Learner has earned Level 5 qualification. No previous experience is required
<b>Pre-requisite module titles</b>	None
<b>Co-requisite module titles</b>	None
<b>Is this a capstone module? (Yes or No)</b>	No
<b>Staff qualifications (academic, pedagogical and professional/occupational) and experience required. (staff includes workplace personnel who are responsible for learners such as apprentices, trainees and learners in clinical placements)</b>	Staff are required to have at least a Master's qualification in Sound Design or related discipline. Industry experience would be a benefit but is not a requirement. Staff are expected to have the Certificate in Training and Education qualification from Griffith College or its equivalent.
<b>Staff/learner ratio per centre (or instance of the module)</b>	For lecture load, ratio of 1:50 lecturer to learner is required and in lab sessions the maximum allowed is 1:25 The lecturer will also have 1 hour per week set aside in their timetable for 1:1 contact with learners who require it or have particular items they want to discuss.
<b>Maximum number of learners per centre (or instance of the module)</b>	50
<b>Duration of the Module</b>	One Academic Semester, 12 weeks teaching
<b>Average (over the duration of the module) of the contact hours per week.</b>	3
<b>Physical resources and support required per centre (or instance of the module)</b>	One lecture hall with capacity at least 50 and one practical lab with PA system.

Analysis of Required Learning Effort									
Effort while in contact with staff									
Classroom and Demonstrations	Mentoring and small group tutoring		Other (Specify)		Directed e-learning (hours)	Independent learning (hours)	Other hours (specify)	Work-based learning hours of learning effort	Total Effort (hours)
	Minimum ratio teacher/learner	Hours	Minimum ratio teacher/learner	Hours					
24	1:50	12	1:25			89			125
Allocation of marks (within the module)									
					Continuous Assessment	Supervised Project	Proctored practical	Proctored Written Examination	Total
Percentage contribution						100%			100%

### 6.25.1 Module Aims and Objectives

This module is intended to introduce the potential of the game audio industry to the learner. Game audio design processes is taught using incremental steps using industry standard game engines and audio middleware applications. Learners examine the role of audio design in the creation of interactive virtual environments. The principles of audio design for games will be underpinned with a survey of historical, theoretical and practical processes within the area.

### 6.25.2 Minimum Intended Module Learning Outcomes

On successful completion of this module the learner will be able to:

- |          |  |
|----------|--|
| MLO 25.1 | Evaluate current industry requirements for the effective implementation of audio within games. |
| MLO 25.2 | Manage sound world creation and implementation to a professional standard                      |
| MLO 25.3 | Evidence advanced, specialist knowledge of dynamic sound environments                          |
| MLO 25.4 | Analyse and critique key practitioners and seminal works within game audio.                    |

### 6.25.3 Rationale for inclusion of the module in the programme and its contribution to the overall IPLOs

The computer games industry is technology-fuelled environment with many possibilities for the innovative audio designer. This module, much like module 22 for film/tv industry, will again broaden the skillset of the learner, familiarising them with the workflows and practises of the audio for games industry. The learning in this module will contribute to Programme Learning Outcomes 1 and 3 while also providing supplementary learning for Outcome 12.

### 6.25.4 Information Provided to Learners about the Module

Learners enrolled on this module will receive a copy of the module descriptor and assignment briefs, including an outline of the criteria for assessment.

Previous examples of assignments are also presented to the class.

### 6.25.5 Module Content, Organisation and Structure

The module is organised to deliver theory through lectures (2 hours) and supervised tutorials (1 hours). During tutorials, learners will work individually on computer workstations. This will allow the lecturer to work with smaller groups to demonstrate the material. The lectures each week will combine lecture delivery and discussion on the material.

Each lecturer has a time allocated for one-to-one meetings with learners as required. These are not mandatory sessions but available either where the lecturer wishes to discuss an element of the module with a learner, or a learner requests a meeting to discuss a particular topic. These sessions focus on academic issues only.

#### **Module Content:**

##### **Games genres and roles within the games industry**

- Audio requirements within the game environment.
- Definitions of the roles within the game audio industry.
- Production concepts within game audio.

### Sound world creation and implementation

- Sound asset creation.
- Design practices for an interactive sound world.
- Implementation processes using an industry standard game engine.

### Dynamic sound environments

- Soundscape and dynamic sound environments.
- Audio behavioural design within an interactive environment.
- Game audio design documentation.

### Analysis of the key practitioners and seminal works within game audio

- Evidence of research.
- Audio production theory.
- Game audio development stages.
- Key practitioners & seminal works.

## 6.25.6 Module Teaching and Learning Strategy

This module is delivered using a combination of lectures, tutorials and practical sessions. The emphasis will be on learners to take the theoretical knowledge and apply it practically to develop in the areas of game engines and industry standard audio middleware. Industry professionals will conduct workshops and discuss standards, techniques and best practice for session management for the games industry.

Activity	Teaching / Learning Strategy	Learning Environment
<b>Lecture (24 hours)</b>	Lectures / participative discussions / case studies of game audio design techniques	College
<b>Tutorial (12 hours)</b>	Demonstrations of lecture theory / practice using game audio design workflows / practical demonstrations to link theory and practice / training using recording hardware and software	College / Mac lab
<b>Assignment (48 hours)</b>	Practice learning and perfecting sound design for games skills	College
<b>Independent Work (41 hours)</b>	Directed and self-directed learning / home study	College / Home

## 6.25.7 Timetabling, Learner Effort and Credit

The module is timetabled as one 3-hour session to the whole class. These will generally take the form of a 2-hour lecture followed by a 1-hour tutorial on workstations allowing the lecturer to work individually with learners to demonstrate the material.

It is our view that 5 ECTS of learner effort is required by learners coming new to the material to achieve the learning outcomes required.

## 6.25.8 Work-based Learning and Practice-placement

There is no work based learning or practical placement involved in the module.

### 6.25.9 E-Learning

The College VLE is used to disseminate notes, advice and online resources to support the learners. The learners are also given access to Lynda.com as a resource for reference.

### 6.25.10 Module Physical Resource Requirements

Requirements are for a fully equipped lecture hall and access for each group to a lab with computer workstations. Each workstation should have audio synthesis and editing software and have industry standard middleware packages. Learners will require bookable studio access for recording elements.

### 6.25.11 Reading Lists and other Information Resources

#### Recommended Reading

Collins, K. (2013) *Playing with sound: a theory of interacting with sound and music in video games*. Boston MA: MIT Press.

House, M. (2017) *Spatial Audio (From: Virtual Reality, An Overview for Developers)* Lynda.com

Looney, S. & Horowitz, S. (2014) *The essential guide to game audio*. Oxford: Focal Press.

Marks, A. (2013) *The complete guide to game audio: for composers, musicians, sound designers, and game developers*

Stevens, R & Raybould, D. (2013) *The game audio tutorial: a practical guide to sound and music for interactive games*. Oxford: Focal Press.

#### Supplemental Reading

Barr, C. (2017) *Virtual Reality Foundations* Lynda.com

Brandon, A. (2004) *Audio for games: planning, process, and production*. Berkeley CA: New Riders Games.

Childs, G.W. (2007) *Creating Music and Sound for Games*. Cengage Learning.

Collins, K. (2008) *Game sound: an introduction to the history, theory and practice of video game sound*. Boston MA: MIT Press

Hoffert, P. (2007) *Music for new media: composing for videogames, websites, presentations and other interactive media*. Boston MA: Berklee Press.

Collins, K. 2008. *From Pac-Man to Pop Music: Interactive Audio in Games and New Media*. Ashgate.

Stevens, R & Raybould, D. (2013) *Game audio implementation*. Oxford: Focal Press

Wilde, M.D. (2004) *Audio programming for interactive games: the computer music of games*. Oxford: Focal Press

<http://iasig.org>

<http://filmsound.org/game-audio/>

<http://gamesounddesign.com>

<http://wikindx.com/gameaudio/wikindx4/>



### 6.25.12 Specifications of Module Staffing Requirements

For each instance of the modules, one lecturer qualified to at least Master's level in music technology or equivalent, and with a relevant third level teaching qualification (e.g. Certificate in Training and Education). Depending on numbers a lab assistant may be required. Where this is the case the Assistant will be required to have a sound understanding of sound design, either through industry experience or academic qualification. For example, a postgraduate student of Audio and Music Production may be suitable to assist the lecturer in lab sessions. Any lab assistant will work under the supervision of the lecturer.

### 6.25.13 Module Assessment Strategy

Element No	Weighting	Type	Description	Learning Outcomes Assessed
1	40%	Presentation	Learners will research the work of a key practitioner of a game audio designer. They will present their findings as an in-class presentation using presentation software.	23.1, 23.2, 23.3
2	60%	Assignment	Learners will be provided with a game by the tutor for which they will create a dynamic, multi-channel spatial audio soundtrack using game audio software and audio production techniques with an accompanying technical log.  As part of the assignment, learners will be required to attend scheduled meeting with a tutor for feedback. This will contribute to a continuous assessment element.	23.1 – 23.4

### 6.25.14 Sample Assessment Materials

#### Assignment 1 – Presentation:

You must choose any key Sound Designer from the games industry. Once chosen, you will research the collected work of the chosen practitioner.

You will then do an in-class presentation of your research.

Your presentation should consist of no more than 20 slides, each no more than 20 seconds in duration. You must use presentation software to present your material.

#### Assignment 2 – Dynamic Audio Soundtrack.

Your tutor will provide you with a game.

You must then implement and dynamic audio soundtrack for the game provided. You will implement your original audio into the game engine. The audio must contain some stereo and surround sound and/or spatial elements.

## 6.26 Module 26: Client Project 2

<b>Module Title</b>	Client Project 2
<b>Module NFQ Level (only if an NFQ level can be demonstrated)</b>	8
<b>Module number/Reference</b>	BAAMT308
<b>Parent Programme</b>	BA (Hons) in Audio and Music Technology
<b>Stage of Parent Programme</b>	3
<b>Semester</b>	2 and summer
<b>Module Credit Units (FET/HET/ECTS)</b>	ECTS
<b>Module Credit number of Units</b>	15
<b>List the teaching and learning modes</b>	FT
<b>Entry requirements (statement of knowledge, skill and competence)</b>	Learner has earned Level 5 qualification. No previous applications technology ability is required.
<b>Pre-requisite module titles</b>	None
<b>Co-requisite module titles</b>	None
<b>Is this a capstone module? (Yes or No)</b>	No
<b>Staff qualifications (academic, pedagogical and professional/occupational) and experience required. (staff includes workplace personnel who are responsible for learners such as apprentices, trainees and learners in clinical placements)</b>	Staff are required to have at least a Master's qualification in Audio and Music Technology or related discipline. Industry experience would be a benefit but is not a requirement. Staff are expected to have the Certificate in Training and Education qualification from Griffith College or its equivalent.
<b>Staff/learner ratio per centre (or instance of the module)</b>	For lecture load, ratio of 1:50 lecturer to learner is required and in lab sessions the maximum allowed is 1:25 The lecturer will also have 1 hour per week set aside in their timetable for 1:1 contact with learners who require it or have particular items they want to discuss.
<b>Maximum number of learners per centre (or instance of the module)</b>	50
<b>Duration of the Module</b>	One Academic Semester, 12 weeks teaching
<b>Average (over the duration of the module) of the contact hours per week.</b>	3
<b>Physical resources and support required per centre (or instance of the module)</b>	One lecture hall with capacity at least 50 and one computer lab with capacity of 25.

Analysis of Required Learning Effort									
Effort while in contact with staff									
Classroom and Demonstrations	Mentoring and small group tutoring		Other (Specify)		Directed e-learning (hours)	Independent learning (hours)	Other hours (specify)	Work-based learning hours of learning effort	Total Effort (hours)
	Minimum ratio teacher/learner	Hours	Minimum ratio teacher/learner	Hours					
24	1:50	12	1:25			139		200	375
Allocation of marks (within the module)									
					Continuous Assessment	Supervised Project(s)	Proctored practical	Proctored Written Examination	Total
Percentage contribution					20%	80%			100%

### 6.26.1 Module Aims and Objectives

This module aims to develop the learner's ability to work at a professional level in the role of a music technologist in a modern recording studio. The learner is encouraged to utilise technical and interpersonal skills to facilitate the smooth flow of a project through its various stages from pre-production to completion.

## 6.26.2 Minimum Intended Module Learning Outcomes

On successful completion of this module the learner will be able to:

- |          |   |
|----------|---|
| MLO 26.1 | Assume the role of producer for a client at a professional level.   |
| MLO 26.2 | Manage the technical elements of a project from pre-production to final realisation to a professional standard. |
| MLO 26.3 | Plan and budget a major project effectively   |
| MLO 26.4 | Produce within a deadline a fully realised project to professional industry standard.                           |
| MLO 26.5 | Communicate effectively with personnel and artists and management.  |

## 6.26.3 Rationale for inclusion of the module in the programme and its contribution to the overall IPLOs

This module aims to give the learners direct experience of real-life work problems in the music industry through triangulation between industry, tutors and learners.

The professional client based project will require learners to work with a client to produce work of a commercial standard. Learners will be encouraged to source their own client for this project and to submit the client proposal for approval by the College.

The module addresses Programme Learning Outcomes 8 and 9 while also underpinning knowledge and skills for Outcomes 5 and 10.

## 6.26.4 Information Provided to Learners about the Module

Learners enrolled on this module will receive a copy of the module descriptor and assignment briefs, including an outline of the criteria for assessment.

Previous examples of assignments are also presented to the class.

## 6.26.5 Module Content, Organisation, and Structure

The module is organised to deliver theory through lectures (2-hours) and supervised tutorials (1-hour). During tutorials, each learner will have a workstation allowing the lecturer to work individually with learners to demonstrate and explain the material.

The 1-hour lectures each week will combine lecture delivery and discussion on the material.

Each lecturer has a time allocated for one-to-one meetings with learners as required. These are not mandatory sessions but available either where the lecturer wishes to discuss an element of the module with a learner, or a learner requests a meeting to discuss a particular topic. These sessions focus on academic issues only.

### Module Content

The curriculum for this module involves the practical application of the content of Module 23: Recording and Mixing 2

#### Client

- project pitching
- liaising

#### Peer group

- observation
- assessment
- feedback

#### Tutorials

- project management & development
- client/learner/tutor triangulation

### 6.26.6 Module Teaching and Learning Strategy

Regular tutorials with programme leaders will run in parallel with the large body of individual work undertaken in this module. Peer group observation, peer assessment and peer group feedback will assist learner development through group tutorials.

Activity	Teaching / Learning Strategy	Learning Environment
<b>Tutorial (36 hours)</b>	In-depth focus on music production elements / music technology exercises and mastering. Peer group observation, assessment and feedback.	College / Mac lab
<b>Assignment (200 hours)</b>	Practice learning and perfecting music production and technology skills/ client liason required for producers	College
<b>Independent Work (139 hours)</b>	Directed and self-directed learning / home study / access to online resources	College / Home

### 6.26.7 Timetabling, Learner Effort and Credit

The module is timetabled as one 3-hour lecture to the whole class. This will consist of the 2.0-hour lecture, and a 1.0-hour lab tutorial.

The number of credits assigned to this module is our assessment of the learner effort required. It is our view that 15 ECTS of learner effort is required by learners coming new to the material to achieve the learning outcomes required.

### 6.26.8 Work-based Learning and Practice-placement

There is no work based learning or practical placement involved in the module.

### 6.26.9 E-Learning

The College VLE is used to disseminate notes, advice and online resources to support the learners. The learners are also given access to Lynda.com as a resource for reference.

### 6.26.10 Module Physical Resource Requirements

Requirements are for a fully equipped lecture hall and access for each group to 1.5 hour sessions in a computer lab. Individuals will also need access to recording studios, editing suites, PA system and/or audio post-productions suites as per the needs of their project.

### 6.26.11 Reading lists and other learning materials

#### Recommended reading

Maylor, H., 2010. *Project management*, Harlow England: Financial Times Prentice Hall.  
Cook, Frank D., 2016. *Pro Tools 210M*, London England: Avid Learning Series.  
Dvorin, David., 2015. *Logic Pro X Advanced Audio Production*, Berkeley CA: Peachpit Press.  
Massy, S., 2017. *Sylvia Massy: Unconventional Recording*. Lynda.com  
Crane, L., 2016 *Music Production Secrets*. Lynda.com

#### Secondary reading

Cole, B. (2006) *The pop composer's handbook: a step by step guide to the composition of melody, harmony, rhythm and structure*. London: Schott.  
Rumsey, F. (2004) *Desktop audio technology: digital audio and MIDI principles*. Oxford: Focal

### 6.26.12 Specifications for Module Staffing Requirements

For each instance of the module, there will be one lecturer qualified to at least Master's level in Music or equivalent, and with a relevant third level teaching qualification (e.g. Certificate in Training and Education). Depending on numbers a lab assistant may be required. Where this is the case the Assistant will be required to have a sound understanding of music theory, either through industry experience or academic qualification. For example, a postgraduate student of Audio and Music Production may be suitable to assist the lecturer in lab sessions. Any lab assistant will work under the supervision of the lecturer.

### 6.26.13 Module Summative Assessment Strategy

Name	Description	Weight	Learning Outcomes
Assignment 1: Client Based Project	For this assignment, learners will have the opportunity to develop project material provided by a chosen client and produce production studies appropriate to the given material.	60%	1. 2. 3. 4. 5
Assignment 2: Continuous Assessment	Continual assessment of the project's development will be undertaken through production/progress meetings during the course of the module.	20%	2. 3.
Assignment 3: Documentation	Learners are required to document the development of the client project; critical reflection of self and working process and evaluation of the completed artefacts is required.	20%	4. 5.

### 6.26.14 Sample Assessment Materials

#### Client Based Assignment

The ability to appraise the potential of a client's musical material is an aspect of the role of an audio professional. Often the engineer/producer is presented with under developed material by a client who lacks the critical skills the audio professional has to identify and develop a complete production.

In the role of audio professional your processes will require experimentation with a range of approaches and consider aspects of delivery and presentation. The pre-production aspects of the work will be crucial as to the most effective way of developing the material/project. In this assignment you will have the opportunity to develop a range of material provided to you by your chosen client.

Working independently you will fully develop the material/project from that presented to you by your client.

**The form of which must be negotiated and agreed with the tutors through the production meeting/tutorial process.**

There are no strict requirements as regards to the project, its form and delivery but your completed project should display an understanding of the material chosen.

The production approaches of the works should evidence effective management of processes. Production meetings will be held and will form part of the assessment of this assignment. The production meetings will be peer reviewed. You must articulate clear ideas and working methodologies applicable to your chosen materials.

## 7 PROGRAMME TEACHING STAFF

### 7.1 Programme Director and Board

Programme Director:	Mr. Ken Haughton
Year Heads:	Year 1: Mr. Niall McMonagle Year 2: Mr. Jim Eadie Year 3: Mr. Ken Haughton
Programme Administrator:	Ms. Janet Hamill
Board Members:	Mr. Tony Perrey Dr. Tomás Mac Eochagáin Mr. Niall McMonagle Ms. Debbie Smith Mr. Ken Haughton Mr. Jim Eadie

### 7.2 Profile of Teaching Staff

The directors and managers of Griffith College and Pulse College have continuous experience of programme delivery over 20 years. The teaching staff members comprise Griffith College's and Pulse College's existing teams of Programme Directors and lecturers, all of whom have previous experience of successfully delivering accredited third level programmes.

As senior members of their departments and faculties, they have direct experience of successfully designing, delivering and managing academic programmes at undergraduate, higher diploma, postgraduate and masters programmes.

The team members have direct experience of delivering accredited training programmes at diploma and degree level in Audio Production. These programmes successfully prepare industry ready graduates with the knowledge and competences to operate in industry to exacting international requirements.

Details of the team members proposed for the programme are provided in Appendix 3.

### 7.3 Programme Specific staff performance management arrangements

The programme is directly managed by the Programme Director. The Year Head is a point of contact for the learners and the lecturers in a particular learner cohort. Each cohort elects one, and in some cases two, class representatives who attend programme committee meetings, which are held twice a semester.

Each cohort of learners is surveyed, using QA FA1 survey form, for their feedback on module delivery. This is managed by the Faculty Administrator, and normally occurs after week four of the semester. The forms are analysed by the Programme Director and Head of Faculty and



any issues identified are addressed. Lecturers are informed in summary of the feedback, whether positive or negative.

Learners are surveyed separately each semester in relation to Facilities and Services, using survey form QA FA2, for feedback on their views of the facilities and support services available. This survey is carried out by the Quality Assurance and Enhancement office, and summary results are communicated to the faculty and the Colleges' management boards. Issues identified are then discussed and action plans to deal with them are put in place.

#### **7.4 Arrangements for approval of staff who will have a formal role in this programme**

Full time staff will be appointed to the programme by the Head of Faculty in consultation with the Programme Director and senior staff within the Faculty. These decisions are informed by discipline expertise, existing teaching load, and other academic or administrative commitments. Where extra human resources are required they will be recruited. See section 7.6 below.

#### **7.5 CVS for the programme's key staff (e.g. programme leadership) and for the identified complement of staff**

Staff CVs are included in Appendix 3 below.

#### **7.6 Recruitment plan for staff not already in post**

In the current case a cohort of lecturers to deliver the programme has been identified. These are listed in Appendix 3. If one or more of those lecturers is not available, then the normal recruitment procedures as set out in QA I1 will be activated. Appointment of any applicant for a lecturing post is the responsibility of the Head of Faculty who will agree the job specification with the Human Resources department. The HR Department is responsible for advertising the post, filtering applicants, and arranging interviews. The Head of Faculty will be on interviewing panel. All applicants for lecturing posts will need to supply complete and accurate information and references. All applicants will be required to give a sample lecture on a designated topic to the panel demonstrating their ability to deliver material in lectures in a concise and clear manner demonstrating good communication skills and discipline knowledge.

All new lecturers will undergo a process of induction within the Faculty. The Centre for Promoting Academic Excellence also arranges a full day series of talks and supports for new lecturers before the start of each semester. A Lecturers' handbook is also provided which contains necessary information to ensure a new lecturer is well informed of College supports and requirements.

A copy of the 2016 / 2017 lecturers' handbook is available from the College's Centre for Promoting Academic Excellence.

## **8 PHYSICAL RESOURCES**

### **8.1 Specification of the programme's physical resource requirements**

Lectures will be delivered in lecture halls or classrooms of a sufficient size to comfortably seat the relevant cohorts of learners. These are equipped with the necessary IT equipment necessary to allow electronic delivery of lectures, using presentation software.

The College's music production and recording IT labs have sufficient capacity to accommodate groups of 25 students at a time for teaching purposes. The Colleges also have sufficient recording studio capacity to support the tutorials and live demonstrations in addition to a live performance area with appropriate PA system.

### **8.2 Complement of supported physical resources (or potential ones)**

#### **8.2.1 Premises**

The physical resources to deliver this programme are available at Pulse College's Windmill Lane Campus and at GC, Dublin. Lecture halls, computer labs, hardware labs, and learner support resources such as library, restaurant, and student services are available at GC.

#### **8.2.2 Informational technology resources**

IT resources in the College are managed through the College's IT Services department. The main software resource is the Moodle virtual learning environment, available to all registered learners and which is programme specific and module specific. It is the main source of communication with the learners during their programme.

Learners can also access the library catalogue online and reserve, renew, or request books. They also have access to Lynda.com, eBooks, journals, and databases.

#### **8.2.3 Materials for teaching, learning and assessment (software and printed)**

A lot of teaching and learning materials are provided through the Moodle VLE. All lecture notes are provided, as well as links to relevant articles etc. In some case videos are used to provide quizzes and other support materials. Where beneficial, lecturers may also supply printed copies of notes in booklet form.

#### **8.2.4 Specialised equipment**

A high specification computer is required for this programme typically, Apple Mac, as well as specialist recording equipment such as audio interfaces, MIDI keyboards, headphones, microphones and speakers. These requirements are similar to those

used on the College's Bachelor of Arts programme in Music Production. The necessary equipment for that programme has been in place and will also be available for this proposal. Additional similarly specified labs and workstations will be acquired on an ongoing basis to match growth in student numbers.

### **8.2.5 Technical and administrative support services**

Technical support is provided through the Colleges' IT Services departments, who manage the college intranets and maintain all computers, labs and studios. The departments also maintain all relevant software licences and in consultation with faculties ensure their installation and operation in college labs.

Administrative support services are supplied at a number of levels. At faculty level the programme administrator is responsible for learner registration information, assessment collection, checking and inputting into the College student information system. Support for this is also provided by the Student Services department which encompasses the overall responsibility for data within the student information system, registration, academic administration, examinations, and liaison with the awarding bodies.

### **8.3 Company placement resources**

The programme does not involve a company placement. Other programmes within the faculty do have placements and resources are in place should the need arise, including a dedicated placement officer.

### **8.4 Criteria for approving a new centre where the programme may be provided**

There are no plans to deliver the BA (Hons) in Audio and Music Technology in different centres. Any proposal to deliver the programme at a different campus requires approval from the Management Board (MB), the Academic and Professional Council (APC), and QQI.

Griffith College and Pulse College have experience of managing multiple centre provision. Griffith College operates two centres in Dublin and one each in Cork and Limerick. Similarly, Pulse College operates its programmes from two centres in Dublin. In the event of the Colleges wishing to deliver the programme in another campus, a proposal would be submitted to QQI in accordance with Griffith College's collaborative provision and existing QAE policies procedures practices and guidelines in respect of the approval of new centres.

## **8.5 Entitlements to use the property required**

All of the properties mentioned for delivery of this programme are owned by Griffith College and Pulse College. The programme documentation has been developed collaboratively by Griffith College and Pulse College and so all intellectual property rights are also owned collaboratively. Griffith College and Pulse College have collaborative entitlements to the necessary resources required to deliver this programme.

## 9 PROGRAMME MANAGEMENT

### 9.1 Documented procedures for the operation and management of the programme

Quality Assurance for the proposed programme is governed by Griffith College's Quality Assurance and Enhancement Policies, Procedures, Practices and Guidelines (QA Manual)<sup>2</sup>. Quality of provision is the responsibility of the Faculty, with other College departments such as Exams Office, QAE Office and Director of Academic Programmes being responsible for on-going monitoring of quality.

All programmes have external examiners appointed. The procedure governing such appointments is laid out in Procedure for Nominating and Appointing External Examiners (QA E1). The roles and responsibilities expected for external examiners are laid out in Roles and Responsibilities of External Examiners (QA E2)

The recruitment of staff for any programme is dealt with by the Head of Faculty in liaison with the Human Resources Department as described in 7.6 above.

### 9.2 Supplementary QA Procedures for the programme

There are no specific supplementary QA procedures required for the programme proposed.

### 9.3 Membership and terms of reference for the programme board

The programme board consists of the academic directors of both colleges, the programme director and members of the lecturing team.

The programme board is responsible for managing the delivery of the programme in accordance with Griffith College's quality assurance procedures, reviewing its progress and preparing annual reports on its delivery for consideration by the College's Academic and Professional Council.

#### **Programme Board**

Mr. Tony Perrey	Pulse College President
Dr. Tomás Mac Eochagáin	Director of Academic Programmes, Griffith College
Mr. Niall McMonagle	Programme Director of BA (Hons) in Audio and Music Technology
Mr. Ken Haughton	Programme Director of BA (Hons) in Music Production
Ms. Debbie Smith	Programme Director of Certificate in Music Production for Games

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<sup>2</sup> [www.gcd.ie/qualityassurance](http://www.gcd.ie/qualityassurance)

## 9.4 Collaborative Provision

It is proposed that the programme will be managed by Griffith College in accordance with its existing QQI approved quality assurance procedures. Identical programme management and organisational structures will apply to the programme as to the College's other programmes, using Programme Directors, year heads, module leaders, programme administrators, supported by the College's existing academic and administrative departments (e.g. examinations, admissions, etc.).

The expertise and resources of Pulse College will be integrated into the programme delivery to ensure its continued relevance to industry. Programme board members will be drawn from GC and PC in order to best present a single coherent programme team for learners advancing their academic and professional capabilities. All delivery, lecturer and learner assessment will be governed by GC's quality assurance procedures.

GC and PC have an existing collaboration on the Bachelor of Arts (Honours) in Music Production. Modules from Bachelor of Arts (Honours) in Music Production will provide an opportunity for shared modules for participants on both Bachelor of Arts (Honours) in Audio and Music Technology and the Bachelor of Arts in Music Production. The proposed shared modules occur during Stage One of both programmes. They are:

Music Technology 1,  
Recording Studio Principles and  
Applications technology

GC and PC have an existing Consortium Agreement which has been updated to reflect the current application and submitted as part of this application.

## 9.5 Transnational Provision

It is proposed that the programme will be delivered in Dublin using the existing resources of GC and PC. Any application to deliver the programme internationally would be subject to separate consideration and approval by QQI.

At this stage, it is not proposed to deliver these programmes outside Ireland.

## APPENDICES

### Appendix 1: Currently Approved Programmes

Programme Title	Subject Benchmark	Dates of Programme Approval	Qualification level on NFQ (and related ECTS credits)	Awarding body/ organisation	Professional Self-Regulatory Body / approved for exemptions
Certificate in Dual Career Development (Sport)	Business	Sept 2015 – Sept 2016	7 (20)	QQI	Irish Sports Council
Certificate in Office Administration	Business	Sept 2011 - Sept 2015	6 (60)	QQI	
Higher Certificate in Business Studies	Business	Sept 2015 - Sept 2019	6 (120)	QQI	
BA in Marketing	Business	Sept 2015 - Sept 2019	7 (60)	QQI	
BA in Business	Business	Sept 2015 - Sept 2019	7 (60)	QQI	
BA (Hons) in Accounting & Finance	Business	Sept 2015 - Sept 2019	8 (180)	QQI	ACCA / CPA
BA (Hons) in Business Studies	Business	Sept 2015 - Sept 2019	8 (180)	QQI	
Post Graduate Diploma in Business in Accounting and Finance Management	Business	Sept 2013 - Sept 2017	9 (60)	QQI	
MSc in Accounting & Finance Management	Business	Sept 2013 - Sept 2017	9 (90)	QQI	
Certificate in Advanced Taxation Planning and Advice	Business	Sept 2012 - Sept 2016	8 (20)	QQI	CPA
Diploma in International Hospitality Management	Business	Sept 2015 - Sept 2019	7 (60)	QQI	

BA (Hons) in International Hospitality Management	Business	Sept 2015 - Sept 2019	8 (180)	QQI	Irish Hospitality Federation
Certificate in International Business	Business	Sept 2013 - Sept 2017	8 (30)	QQI	
Post Graduate Diploma in Business in International Business	Business	Sept 2013 - Sept 2017	9 (60)	QQI	
Master of Science in International Business Management	Business	Sept 2013 - Sept 2017	9 (90)	QQI	
Post Graduate Diploma in International Business and Law	Business	Sept 2014 - Sept 2018	9 (60)	QQI	
Post Graduate Diploma in International Procurement and Supply Management	Business	Sept 2014 - Sept 2018	9 (60)	QQI	
MSc in International Procurement and Supply Management	Business	Sept 2014 - Sept 2018	9 (60)	QQI	
MSc in Pharmaceutical Management	Business	Sept 2015 - Sept 2019	9 (90)	QQI	
MBA in International Business	Business	Sept 2013 - Sept 2017	9 (90/120)	QQI	
Postgraduate Certificate in Business Administration	Business	Sept 2012 – Sept 2016	30	HWU	Edinburgh Business School Heriot-Watt
Postgraduate Diploma in Business Administration	Business	Sept 2012 – Sept 2016	60	HWU	
Master of Business Administration (MBA)	Business	Sept 2012 – Sept 2016	90	HWU	
Certificate in SME Management	Business	Sept 2013 - Sept 2017	7 (15)	QQI	ISME - Irish Small and Medium Enterprises Association
Certificate in Small and Medium Enterprise Marketing and Sales	Business	Sept 2013 - Sept 2017	7 (20)	QQI	



Diploma in Investment Operations and Compliance	Business	Sept 2013 - Sept 2017	8 (30)	QQI	
Professional Diploma in Management & Leadership	Business	Sept 2013 - Sept 2017		BTEC	
BA (Hons) in Pharmaceutical Business Operations	Business / Pharmaceutical	Sept 2015 - Sept 2019	8 (60)	QQI	
Special Purpose Certificate in Pharmaceutical Data Analytics	Business / Pharmaceutical	Sept 2015 - Sept 2019	8 (50)	QQI	
MSc in Pharmaceutical Business Operations	Business / Pharmaceutical	Sept 2015 - Sept 2019	9 (90)	QQI	
Special Purpose Certificate in Pharmaceutical Data Analytics	Business / Pharmaceutical	Sept 2014 - Sept 2018	7 (50)	QQI	
BA in Pharmaceutical Business Operations	Business / Pharmaceutical	Sept 2014 - Sept 2018	7 (60)	QQI	
Certificate in Applied Social Studies	Humanities	Sept 2013 - Sept 2017	5	QQI / FETAC	
Certificate in Early Childhood Care & Education	Humanities	Sept 2013 - Sept 2017	5	QQI / FETAC	
MSc in International Business and Law	Business / Law	Sept 2014 - Sept 2018	9 (90)	QQI	
BA (Hons) in Law with Business	Business / Law	Sept 2014 - Sept 2018	8 (180)	QQI / NTU	King's Inns / Law Society of Ireland
LLB (Hons.) in Irish Law	Law	Sept 2014 - Sept 2018	8 (180)	QQI / NTU	
Postgraduate Diploma in International Commercial Law	Law	Sept 2014 - Sept 2018	9 (60)	QQI / NTU	
Master of Laws in International Commercial Law (LLM)	Law	Sept 2014 - Sept 2018	9 (90)	QQI / NTU	
Postgraduate Diploma in International Human Rights Law	Law	Sept 2014 - Sept 2018	9 (60)	QQI / NTU	

Master of Laws in International Human Rights Law (LLM)	Law	Sept 2014 - Sept 2018	9 (90)	QQI / NTU	
Post Graduate Diploma in International Law	Law	Sept 2014 - Sept 2018	9 (60)	QQI / NTU	
Master of Laws in International Law (LLM)	Law	Sept 2013 - Sept 2017	9 (90)	QQI / NTU	
Certificate in Mediation	Law	Sept 2013 - Sept 2017	9 (30)	QQI	
Certificate in Legal Studies	Law	Sept 2011 - Sept 2015	6 (60)	QQI	Irish Institute of Legal Executives
Diploma in Legal Studies and Practice	Law	Sept 2014 - Sept 2018	7 (120)	QQI	
Certificate in Computing Science	Computing	Sept 2013 - Sept 2017	6 (60)	QQI	
Certificate in Computer Games Technology	Computing	Sept 2012 - Sept 2016	6 (60)	QQI	
Higher Certificate in Computing	Computing	Sept 2013 - Sept 2017	6 (120)	QQI	
BSc in Computing	Computing	Sept 2013 - Sept 2017	7 (180)	QQI	
BSc (Hons) in Computing Science	Computing	Sept 2013 - Sept 2017	8 (240)	QQI	
Higher Diploma in Science in Computing	Computing	Sept 2013 - Sept 2017	8 (90)	QQI	
Higher Diploma in Science in IT Infrastructure	Computing	Sept 2011 - Sept 2015	8 (90)	QQI	
Higher Diploma in Science in Web Development	Computing	Sept 2011 - Sept 2015	8 (90)	QQI	
Certificate in Cloud Computing	Computing	Sept 2013 - Sept 2017	9 (30)	QQI	
Certificate in Networking	Computing	Sept 2013 - Sept 2017	9 (30)	QQI	
Certificate in Software Development	Computing	Sept 2013 - Sept 2017	9 (30)	QQI	
Postgraduate Diploma in Networking	Computing	Sept 2013 - Sept 2017	9 (60)	QQI	

Postgraduate Diploma in Software Development	Computing	Sept 2013 - Sept 2017	9 (60)	QQI	
Post Graduate Diploma in Science in Big Data Management and Analytics	Computing	Sept 2014 - Sept 2018	9 (60)	QQI	
Master of Science in Big Data Management and Analytics	Computing	Sept 2014 - Sept 2018	9 (90)	QQI	
Postgraduate Diploma in Science in Computing	Computing	Sept 2013 - Sept 2017	9 (60)	QQI	
Master of Science in Computing	Computing	Sept 2013 - Sept 2017	9 (90)	QQI	
Postgraduate Diploma in Science in Cloud Computing	Computing	Sept 2014 - Sept 2018	9 (60)	QQI	
Master of Science in Cloud Computing	Computing	Sept 2014 - Sept 2018	9 (90)	QQI	
Postgraduate Diploma in Science in Applied Digital Media	Computing	Sept 2013 - Sept 2017	9 (60)	QQI	
Master of Science in Applied Digital Media	Computing	Sept 2013 - Sept 2017	9 (90)	QQI	
Postgraduate Diploma in Science in Network and Information Security	Computing	Sept 2014 - Sept 2018	9 (60)	QQI	
Master of Science in Network and Information Security	Computing	Sept 2014 - Sept 2018	9 (90)	QQI	
BA in Design (Interior Architecture)	Design	Sept 2013 - Sept 2017	7 (180)	QQI	Institute of Designers in Ireland
BA in Interior Design	Design	Sept 2013 - Sept 2017	7 (180)	QQI	
BA (Hons) in Interior Architecture	Design	Sept 2013 - Sept 2017	8 (240)	QQI	
BA (Honours) in Fashion Design	Design	Sept 2013 - Sept 2017	8 (180)	QQI	

BA (Hons) in Design Communications	Design	Sept 2014 - Sept 2018	8 (180)	QQI	
MA in Design (Interior Architecture)	Design	Sept 2013 - Sept 2017	9 (90)	QQI	
Certificate in Training and Education	Education	Sept 2014 - Sept 2018	9 (20)	QQI	
Postgraduate Diploma in Arts in Training and Education	Education	Sept 2014 - Sept 2018	9 (60)	QQI	
Master of Arts in Training and Education	Education	Sept 2014 - Sept 2018	9 (90)	QQI	
Certificate in Drama Education	Education / Drama	Sept 2014 - Sept 2018	8 (20)	QQI	
Certificate in Drama Performance	Drama	Sept 2014 - Sept 2018	8 (20)	QQI	
Higher Diploma in Arts in Drama Education	Education / Drama	Sept 2014 - Sept 2018	8 (60)	QQI	
Certificate in Music Teaching	Education / Music	Sept 2014 - Sept 2018	8 (40)	QQI	
Higher Diploma Arts in Music Education	Education/ Music	Sept 2014 - Sept 2018	8 (60)	QQI	
Certificate in Music Production for Games	Music	Sept 2012 - Sept 2016	6 (60)	QQI	
BA (Hons) in Music Production	Music	Sept 2012 - Sept 2016	8 (210)	QQI	
Certificate in Musicianship	Music	Sept 2014 - Sept 2018	8 (20)	QQI	
BA in Film and TV Production	Media	Sept 2013 - Sept 2017	7 (180)	QQI	
BA in Photographic Media	Media	Sept 2013 - Sept 2017	7 (180)	QQI	Irish Professional Photographers' Association

BA in Journalism	Media	Sept 2013 - Sept 2017	7 (180)	QQI	National Union of Journalists
BA (Hons) in Journalism & Visual Media	Media	Sept 2013 - Sept 2017	8 (180)	QQI	

Post Graduate Diploma in Arts in Journalism and Media Communications	Media	Sept 2013 - Sept 2017	9 (60)	QQI	
Master of Arts in Journalism & Media Communications	Media	Sept 2013 - Sept 2017	9 (90)	QQI	
Postgraduate Diploma in Journalism & Public Relations	Media	Sept 2013 - Sept 2017	9 (60)	QQI	
MA in Journalism and Public Relations	Media	Sept 2013 - Sept 2017	9 (90)	QQI	
MA in TV and Radio Journalism	Media	Sept 2013 - Sept 2017	9 (90)	QQI	
Postgraduate Diploma in TV & Radio Journalism	Media	Sept 2013 - Sept 2017	9 (60)	QQI	

**Pulse College currently provides the following programmes:**

**Higher Education Third Level:**

- BA (Hons) in Music Production collaboratively with Griffith College
- BA (Hons) in Film and Television Production collaboratively with Griffith College
- MA in Scoring for Film and Visual Media collaboratively with Dublin Institute of Technology

**Vocational Awards:**

- City & Guilds Level 3 Diploma in Music Technology and Sound Engineering (7503)
- City & Guilds Level 3 Diploma in Video Production (7501)
- Higher Certificate in Game Development

**Industry Qualifications:**

- Digidesign ProTools 101
- Digidesign ProTools 110
- Digidesign ProTools 201
- Digidesign ProTools 210M
- Digidesign ProTools 210P
- Digidesign ProTools 310M
  
- Apple Logic 101
- Apple Logic 301
- Sound Track Pro 101
  
- Final Cut Pro 200 Level
- Final Cut Pro 300 Level
  
- Motion Graphics 101
- Colour 101

## Appendix 2: Mapping of Learning Outcomes

### BA (Hons) in Audio and Music Technology

#### Stage 1: Programme Learning Outcome / Module Allocation

STAGE 1	1	2	3	4	5	6	7	8	9	10	11	12
1.Music Technology	1.1		1.2 – 1.5		1.2- 1.5		1.5	1.3, 1.4				
2.Applications Technology	2.1, 2.2	2.1 – 2.5						2.3 – 2.5				
3.Recording Studio Principles	3.1		3.2	3.6		3.1- 3.3, 3.5		3.3, 3.4				
4.Music for Producers 1	4.1 4.2 4.3	4.1 4.2 4.3		4.4	4.5		4.4					
5.Live Music and Performance	5.1, 5.2						5.1 – 5.4	5.4				
6.Computer Basics for Audio-visual Workstations		6.1- 6.5						6.4				
7.Sound Reinforcement 1							7.1 - 7.4	7.4		7.4		
8.Sound Design and Foley FX	8.1		8.1	8.4		8.2, 8.3			8.3			8.4
9. Online Portfolio				9.1						9.2, 9.3, 9.4		

#### Legend: Key to Programme Learning Outcomes (Summaries)

- 1 Demonstrate detailed knowledge and understanding of the underlying concepts and processes underpinning the professional performance and production of music and organized sound across a wide range of contemporary visual media and digital formats.
- 2 Exhibit a thorough and critical understanding of selected musical forms, styles and genres and their psychological and social contexts.
- 3 Creatively apply knowledge of the underlying concepts and functionality of the hardware and software of computer-based audio-visual production systems across a wide range of disciplines.
- 4 Competently conduct sophisticated research, drawing on contemporary developments, and communicate the related specifications and findings clearly to a range of academic and professional audiences.
- 5 Demonstrate proficiency in the application of traditional and evolving music production techniques through their creation and realisation of challenging work.



- 6 Demonstrate safe, effective and ethical work practices using digital audio workstations and professional recording studios through their setting, testing and completion of work to professional standards.
- 7 Produce a live event to a professional standard incorporating the advanced use of multi-media technologies.
- 8 Work competently in a self-directed manner, individually, in peer-relationships, and as a team leader in a variety of interdisciplinary and unfamiliar environments.
- 9 Competently initiate, negotiate and manage audio production projects involving complex workflows and multiple personnel to exacting deadlines.
- 10 Demonstrate professional learning development through a comprehensive portfolio of their work showing personal experimentation, analysis, reflection and progression evidenced in increasingly sophisticated creative projects.
- 11 Advance their professional and or academic careers as they choose either through direct employment / self-employment as professional music and audio producers or by undertaking further postgraduate studies.
- 12 Exhibit an individual flexible approach to their productions which is informed by, but not limited to, research and reflection on leading theorists and practitioners.

**Stage 2: Programme Learning Outcome / Module Allocation**

<b>STAGE 2</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>
10.Music Technology 2				10.1 – 10.4	10.5	10.1	10.1 – 10.4	10.5				
11.Applications Technology			11.1- 11.5			11.1- 11.5						
12.Music for Producers 2	12.1 – 12.4	12.1 – 12.4										
13. Recording and Mixing 1			13.3, 13.5			13.1 – 13.5				13.1	13.2	
14.Live Music and Performance Technology	14.1						14.1, 14.2, 14.4, 14.5	14.3				
15.Research and Presentation				15.1 – 15.6				15.1, 15.2, 15.4, 15.5, 15.6				
16.Sound Reinforcement 2						16.1- 16.4	16.4					
17.Sound Design and Creative Processing	17.1 17.2		17.1 17.3	17.4								17.4
18. Client Project 1					18.1			18.1 – 18.5	18.1 – 18.5	18.1 – 18.5		

**Stage 3: Programme Learning Outcome / Module Allocation**

<b>STAGE 3</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>
19.Dissertation by Practice					19.1-19.6			19.1-19.5			19.4, 19.5	19.4, 19.5
20.Mixing and Mastering		20.1			20.1-20.3	20.1, 20.3			20.2, 20.4			
21.Professional Practice								21.1, 21.4		21.1-21.4	21.1, 21.4	
22.Studio Design and Set Up	22.1 22.2 22.4			22.3			22.1 – 22.3					
23.Recording and Mixing						23.3, 23.4		23.1, 23.2	23.1-23.4		23.1, 23.4	23.1, 23.2
24.Audio Post Production Techniques	24.1 – 24.4			24.1-24.4				24.4	24.9		24.1	24.4
25.Sound Design for Games	25.1 25.3		25.2, 25.3	25.4							25.1	25.4
26. Client Project 2					26.1			26.1 – 26.5	26.1 – 26.5	26.1 – 26.5		

## Appendix 3: Curriculum Vitae of Teaching Staff

### Tony Perrey

<b>Name</b>	Tony Perrey	
<b>Qualifications</b>	Avid Pro Tools Senior Instructor, Apple Logic Senior Instructor	
<b>Employment History</b>	1990-present	Director: Pulse College
	1990-present	Director, Audio Engineer and Music Producer: Windmill Lane Recording Studios
<b>Teaching Experience</b>	1990-present	Lecturer in Audio and Music Technology: Pulse College
<b>Current Teaching Load</b>	Head of Music Technology module, MA in Scoring for Film and Visual Media: Pulse College	
<b>Research papers, publications</b>	n/a	

### Jimmy Eadie

<b>Name</b>	Jimmy Eadie	
<b>Qualifications</b>	Undergraduate	Sound Engineering: City and Guilds (1987)
		Sound Editing for Film: Screen Training Ireland (2000)
		Audio Engineer: Meyer Sound Germany (2001)
		Sound Optimisation for Live Audio: L'Acoustic Sound (2003)
	Postgraduate	M.Phil. in Music and Media Technologies: Trinity College Dublin (1999)
		Teaching and Support Learning Post Grad: Trinity College Dublin (2010)
		Advanced Learning and Adaptive Problem Solving Techniques for Lecturers: Trinity College Dublin (2011)
		E-Teaching and Online Technology: Dublin City University (2012)
<b>Employment History</b>	2006-present	Trinity College Dublin
	2008-present	Pulse College
<b>Teaching Experience</b>	2006-present	Griffith College Dublin
<b>Current Teaching Load</b>	Research level 8 and 9, Music Production/Sound Engineering, Music Technology/Sound Design, Music Composition, Sound Design	

**Stephen Rooney**

<b>Name</b>	Stephen Rooney	
<b>Qualifications</b>	1996	BSc (Mgmt) and Advanced Diploma in International Marketing (French): DIT Mountjoy Square / Trinity College Dublin
	1994	ERASMUS – DUT Logistics and Transport Management: I.U.T.B. de Lille III, LILLE 59000, France.
	1990	Leaving Certificate - 6 Honours: Gonzaga College, Ranelagh, Dublin 6.
<b>Employment History</b>	2007-present	Subeditor: People Newspapers, Wexford
	2003-2007	Self-Employed: Aer Studio, Gorey, Co.Wexford
	2000-2003	Marketing and Administration Manager: Bruce Shaw Partnership, Dublin
	1997-2000	Sales and Marketing Manager: William Cox, Dublin
	1997-1997	Finance Officer: Q-Stores, Sydney, Australia

**Mark Linnane**

<b>Name</b>	Mark Linnane	
<b>Qualifications</b>	2003	M.Phil. Music and Media Technologies: Trinity College Dublin
	2001	BA Music and Philosophy: University College Dublin
<b>Employment History</b>	2013-present	Lecturer in BA Music Production: Pulse College
	2010-present	Freelance AV software designer/educator
	2008-present	Assistant Professor (part-time) in Music and Media Technologies: Trinity College Dublin
	2003-present	Freelance Video Producer
	2010-2011	Researcher in the Department of Electronic and Electrical Engineering: Trinity College Dublin
	2006	Occasional lecturer in Music and Media Technologies: Trinity College Dublin
	2004-2012	Freelance Digital Video/Final Cut Studio Trainer
<b>Teaching Experience</b>	2013-present	Lecturer in BA Music Production: Pulse College
	2010-present	Freelance AV software educator
	2008-present	Assistant Professor (part-time) in Music and Media Technologies: Trinity College Dublin
	2010-2011	Guest Lecturer: School of Creative Arts, University of Ulster
	2006	Occasional lecturer in Music and Media Technologies: Trinity College Dublin
	2004-2012	Freelance Digital Video/Final Cut Studio Trainer
<b>Current Teaching Load</b>	Pulse College: Interactive Audio 1 (5 ECT) - module design, delivery and assessment Interactive Audio 2 (10 ECT) - module design, delivery and assessment	
	Trinity College Dublin: Synthesis and Sound Design - 3 lectures, design, delivery and assessment Interactive Media (5 ECT) – module design, delivery and assessment Supervision of 3 Masters dissertations	
<b>Research papers, publications</b>	M. Linnane, L. Doyle, D. Furlong. <i>Embodied Schemas for Cross-modal Mapping in the Design of Gestural Controllers</i> . Proceedings ISEA 17, the International Symposium on Electronic Arts, Istanbul, 14 – 21 September 2011	
	D. Corrigan, F. Pitie, V. Morris, A. Rankin, M. Linnane, G. Kearney, M. Gorzel, M. O’Dea, C. Lee, A. Kokaram. <i>A Video Database for the Development of Stereo-3D Post-Production Algorithms</i> in European Conference on Visual Media Production (CVMP '10). London, UK, November, pages 64-73.	

**Brendan Rehill**

<b>Name</b>	Brendan Rehill	
<b>Qualifications</b>	2012	B.A Music Production: Windmill Lane/Pulse College
	2008	B.A in English and Philosophy: NUI Galway
<b>Employment History</b>	2016	<p>Smalltown, TV3, Dir: Gerard Barrett: TV Drama. Supervising Sound Editor. Revolution Radio, RTÉ 2FM, Prod: Red Hare Media. Radio Drama. Sound Supervision. PPI Nominated.</p> <p>The Drummer &amp; The Goalkeeper, Dir: Nick Kelly. Feature Film. Foley Editor.</p> <p>Georgie's Vision, RTÉ Lyric FM, Prod: Deirdre Mulrooney. Radio Documentary. Sound Designer.</p> <p>Out Of Sight, Science Gallery Dublin, Prod: Julien Clancy. Live Radio Event. Sound Designer.</p> <p>Can't Cope, Won't Cope, RTÉ 2, Dir: Cathy Brady. TV Drama/Comedy. Foley Editor.</p> <p>Under Into Somewhere, Prod: Anna Rackard Sound Design for Photography Exhibition.</p> <p>Brain on Fire, Dir: Gerard Barrett Feature Film. Foley Editor.</p>
	2015	<p>Limerick: City of Churches, RTÉ Lyric FM, Prod: Regan Hutchins Radio Documentary. Sound Mix. Finalist New York Radio Awards.</p> <p>St.Werburgh's Church, RTÉ Lyric FM, Prod: Regan Hutchins. Radio Documentary. Sound Mix.</p> <p>The Wedding Tree, Newstalk, Prod: Gareth Stack Radio Drama. Sound Recordist and Sound Design.</p> <p>Tomato Red, Dir: Juanita Wilson Feature Film. Foley Editor.</p>
	2014	<p>In The Current, Prod: Yvonne Cullivan. Video Installation. Sound Recordist and Sound Design.</p> <p>Are We Dancing?, RTÉ Lyric FM, Prod: Regan Hutchins. Radio Documentary. Sound Supervision.</p> <p>A Year in SARC, RTÉ Lyric FM, Prod: Clare Cronin. Radio Documentary. Sound Supervision.</p>
	2013-2015	WholeWorldBand, Senior A/V Engineer. iOS Music App. Sound Supervision and Video Editor.
	2012-2013	<p>Re-imagining Opera, RTÉ Lyric FM, Prod: Athena Media Radio Documentary Series. Sound Supervision.</p> <p>Grassroots, Newstalk, Prod: Athena Media. Radio Documentary Series. Sound Supervision.</p> <p>Winning Women, Newstalk, Prod: Athena Media Radio Documentary Series. Sound Supervision. Winner Celtic Media Awards.</p>
	2012	Lean on Me, Dir: Gavin Butler Short Film. Location Recordist and Sound Editor.

**Niall McMonagle**

<b>Name</b>	Niall McMonagle	
<b>Qualifications</b>	2005	Avid ProTools Instructor
	2003	Advanced Diploma in Sound Engineering and Music Technology: Pulse College
<b>Employment History</b>	2003-present	Head of Programme and Lecturer on the Diploma in Audio and Music Technology: Pulse College
	2003-present	Head Engineer and Studio Manager: Windmill Lane Recording Studios
<b>Teaching Experience</b>	2003-present	Head of Programme and Lecturer on the Diploma in Audio and Music Technology: Pulse College
	2003-present	Avid ProTools Instructor
<b>Current Teaching Load</b>	Lecturer in Recording Studio Principles (BAAMP and Diploma in Audio and Music Technology): Pulse College	

**Ken Haughton**

<b>Name</b>	Ken Haughton	
<b>Qualifications</b>	2002	M.Phil. in Music and Media Technologies: Trinity College Dublin
	1987	Civil Engineering: Dublin Institute of Technology
<b>Employment History</b>	2009-present	Head of Programmes for BA (Hons) Music Production: Pulse College Dublin
<b>Teaching Experience</b>	2009-present	Pulse College Dublin
<b>Current Teaching Load</b>	Music Production and Recording, Music Technology, Applications Technology, Critical Listening and Audio Analysis, Explorations in Music, Psychology of Music, Dissertation by Practice/Research, Professional Client Assignments	



**Debbie Smith**

<b>Name</b>	Debbie Smith	
<b>Qualifications</b>	2010 – 2013	MA in Creative Digital Media: Dublin Institute of Technology
	1998 – 2008	Courses in music editing for film/TV, mixing for film/TV, sound location recording for film/TV, composition for film/TV and gaming: Screen Training Ireland (in conjunction with UCLA)
	1995 – 1998	Certificate in Sound Engineering: Pulse College
<b>Employment History</b>	2013 – present	Programme Director for Certificate in Music Production for Games: Griffith College/Windmill Lane Recording Studios
	2008 – present	Lecturer for MA Scoring for Film and Visual Media: Pulse College
	2008 – present	Recording engineer: Pulse College
	2008 – present	Technical manager/Head sound engineer: Dublin Philharmonic Orchestra
	2001 – present	Freelance sound engineer: Lime Street Sound, Dublin
	2000 – 2008	Co-ordinator/Sound engineer/Tutor: Ceoil Productions and Screen Training Ireland (in conjunction with UCLA)
	1998 – present	Sound engineering and music production for various films/TV soundtracks
	1996 – present	Sound engineering and production for various artists/producers/composers

**Alan Kelly**

<b>Name</b>	Alan Kelly	
<b>Qualifications</b>	2006	Diploma in Sound Engineering and Music Production: City and Guilds (Level 3)
		Qualification in Media Production (Level 6)
		Certified Avid ProTools Operator in 210m (Music Production) and 210P (Post Production)
		Live Sound Diploma: Pulse College
		Studio Sound Diploma: Pulse College
<b>Employment History</b>	2013-present	Currently working as a Studio and Live Engineer. I also lecture in Pulse College on a freelance basis. I work with a multitude of genres in music, film and TV production. My clients include; Sharon Corr, The Corrs, Robin Thicke, Herbie Hancock, Jose Gonzalez, The Riptide Movement, Julie Feeney, The Chieftains, Lady Gaga, Jason Durelo, Bressie, Sinéad O'Connor, Westlife, Donal Lunny, Gary Barlow, Ronan Hardiman, Irish Film Orchestra, Spokes Records, Mike Hedges, Larry Klein, RTE, Sky, Hayden Bendell, Brian Masterson, Declan O'Rourke.
	2006-present	Lecturer: Pulse College
	2006-2013	Assistant and House Engineer: Windmill Lane Recording Studios and Pulse Recording Studios
<b>Teaching Experience</b>	2006-present	Pulse College: I teach across a range of modules including Music Technology, Studio Recording, Applications Technology, Post Production, Mixing and Mastering.
<b>Current Teaching Load</b>	2 days per week at Pulse College	

**Caoimhe Doyle**

<b>Name</b>	Caoimhe Doyle	
<b>Qualifications</b>	2013	BA (Hons) Film and Television Production, specialising in sound: The National Film School, IADT
	1989-1992	Diploma in Communications and Media Production, specialising in sound: Colaiste Dhulaigh College
<b>Employment History</b>	1996-present	Freelance and Ardmore Sound, Co. Wicklow
<b>Teaching Experience</b>	2013-present	Pulse College Dublin
	2012-present	Lillehammer University College, Norway
	2010-2014	HKU, University of the Arts, Utrecht, The Netherlands
	2005-2014	University of Limerick

**Lenka Pinterova**

<b>Name</b>	Lenka Pinterova	
<b>Qualifications</b>	2005	Master's Degree in Musicology: Comenius University, Slovakia
	2000	Piano, cembalo, singing: State Conservatory Kosice, Slovakia
<b>Employment History</b>	2013-present	Piano Teacher: Walton's New School of Music
	2013-2015	Office Administrator: McQueen's International College Dublin
	2011-2013	Administrative Manager: London College Dublin
	2007-2011	Administrator: The Language House School of English, Dublin
	2006-2007	Receptionist: Comfort Inn Hotel, Smithfield Square, Dublin
	2004-2005	Shop Assistant: Divyd Hummel Music, Bratislava
	2004	Assistant: Music Centre, Slovakia
	2003	Assistant of Music Dramaturgy: Slovak National Theatre

**Greg Clooney**

<b>Name</b>	Greg Clooney	
<b>Qualifications</b>	2015-present	Currently undertaking an M.Phil. in Music and Media Technologies: Trinity College Dublin
	2006	Diploma in Sound Engineering and Music Production: City and Guilds (Level 3)
		Qualification in Media Production (Level 6)
		Certified Avid ProTools Operator in 210m (Music Production) and 210P (Post Production)
		Certified Apple Professional in Logic Pro X
		Live Sound Diploma: Pulse College
Studio Sound Diploma from Pulse College		
<b>Employment History</b>	2006-present	Currently working as a Studio Engineer, College Lecturer and IT Manager in Windmill Lane Recording and Pulse College on a freelance basis. I also guest lecture for Griffith College and work as a freelance engineer for RTÉ. Duties include recording sessions as Recording Engineer, Producer, Assistant Engineer, and in Pro Tools Operator roles across a wide variety of industry standard, professional environments notably music, television and radio, post production and surround sound for film and animation, sound design and mastering. Clients worked with include; Herbie Hancock, Dionne Warwick, Paolo Nutini, The Chieftains, Westlife, Sharon Corr, Donal Lunny, Gary Barlow, Irish Film Orchestra, Cathy Davey, Mundy, Julie Feeney, Mike Hedges, Larry Klein, RTE, Hayden Bendell, Brian Masterson, Dan Shay, Ger McDonald, Tim Martin, Declan O'Rourke, The Brilliant Things.
<b>Teaching Experience</b>	2013-present	As a senior lecturer and module leader I am responsible for setting assignments and providing written and formative assessment to the student body. I teach across a range of modules including Music Technology, Studio Recording, Applications Technology, Post Production, Mixing and Mastering.
	2006-present	I also lecture for Griffith College on the topics of Music Technology and Applications Technology.
<b>Current Teaching Load</b>	I currently teach 5 days a week across a range of programs for Pulse College and Griffith College.	

**Kevin Brew**

<b>Name</b>	Kevin Brew	
<b>Qualifications</b>	1999	Certificate in Radio Broadcasting: Dublin Institute of Art, Design and Technology
	1994	Bachelor of Business Studies and French: University of Limerick
<b>Employment History</b>	2004-present	Radio Producer: RTÉ Radio 1 <i>Drama on One, Documentary on One, Sound Stories, Lighthouse Stories, The Arts Show, Rattlebag</i>
	2004-present	Music and Sound Design Work: <i>The Hit List</i> by John Boorman for RTÉ Drama on One, <i>By The Book</i> for RTÉ Lyric FM, <i>The Wine Geese</i> for RTÉ Lyric FM, <i>25 x 4</i> for Soundsdoable (independent producer)
	1999-2004	Production Coordinator: RTÉ Lyric FM <i>Artszone, Horizon, The Lyric Feature</i>
<b>Teaching Experience</b>	2014-2016	Guest Lecturer in Sound Design: Pulse College
	2014	EBU Radio Workshop, Stockholm
	2013-2016	Guest Tutor (annual workshop) in Music and Media Technologies: Trinity College Dublin
	1995-1996	Tutorial Assistant in Communications: University of Limerick
<b>Current Teaching Load</b>	Sound Design: Pulse College (January – May)	
<b>Research papers, publications</b>	EBU Workshop in Radio Drama, Stockholm, June 2014	
	The Lighthouse Project, Hearsay Festival, November 2015	
	EBU Workshop in Radio Drama, Prague, April 2016	

**Eva Barba**

<b>Name</b>	Eva Barba	
<b>Qualifications</b>	MA in Third Level Education (1 <sup>st</sup> class honours): Trinity College Dublin	
	Dip. In Teaching ELE: University of Barcelona, U	
	BA (Hons) in International Business and Languages: Dublin City University	
<b>Employment History</b>	2005-2008	SP Advisory Services
	2003-2005	JBP Inversiones
	2002-2003	Catalana de Projectes
	1999-2002	TAS Software/Sage Ireland
	1994-1999	AC Tape and Packaging
<b>Teaching Experience</b>	2008-2009	Language Instructor: UCD
<b>Current Teaching Load</b>	Lecturer/ Business Case Study module coordinator at Trinity College Dublin. I teach four modules to Business students (mostly to final year undergraduates). In addition, I teach a Case Study module where I supervise the writing of a final year dissertation (co-shared with the Business School), under Strategic Management.	

## Appendix 4: Information contained in Griffith College's Programme Information Policy QAC1

Section 4 of that document states:

### **4. Information Provision (Prospective Learners)**

*4.1 In any detailed marketing medium the college uses to describe its programmes the following information shall be made available to prospective learners:*

- 4.1.1 The name of the awarding body and its recognition internationally.<sup>3</sup>
- 4.1.2 The status of the validation, i.e. Validated, Subject to Validation.
- 4.1.3 The framework level designation of the programme.
- 4.1.4 The full programme title and any variations on title which may be open to the learner should they choose particular combinations of modules.
- 4.1.5 Details of any interim awards associated with the programme and the learner's entitlements to same.
- 4.1.6 Details of any association with/recognition by any professional /regulatory/ statutory body.
- 4.1.7 The duration of the programme and the learning modes offered i.e. full-time / part-time / ACCS / distance etc.
- 4.1.8 Maximum / minimum time periods permitted for completion of the programme.
- 4.1.9 Entry requirements and any assessment procedures required for entry.

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<sup>3</sup> Only if Validated. If Subject to Validation no Awarding Body should be mentioned

4.1.10 Transfer and progression routes into and from programmes and details of any regulations governing transfer and progression.

4.1.11 The credit associated with the programme as a whole and each stage of the programme.

4.1.12 The English language level required for entry to the programme.

4.1.13 Documentation required from International learners applying from abroad or residing in Ireland.

4.1.14 Bonding arrangements associated with the programme.

4.2 *In any summary marketing medium the college uses to describe its programmes at least the following information shall be made available to prospective learner:*

4.2.1 The name of the awarding body and its recognition internationally.

4.2.2 The status of the validation, i.e. Validated, Subject to Validation.

4.2.3 The framework level designation of the programme.

4.2.4 The full programme title and any variations on title which may be open to the learner should they choose particular combinations of modules.



## Appendix 5: Student Code of Conduct and Student Charter

### Code of Conduct

#### Griffith College Dublin

#### Quality Assurance Policies, Procedures, Practices and Guidelines

<b>Title:</b>	Learner Code of Conduct
<b>Document No:</b>	QA J3
<b>Issue Version:</b>	1.0
<b>Issue Date:</b>	8.04.05
<b>Related Documents:</b>	Learner Disciplinary Procedure (QA J5) Complaints Procedure for Learners (QA J4) Academic Misconduct Procedure (QA J6) Appeals Procedure (QA E15)
<b>Circulated for comment to:</b>	Academic & Professional Council
<b>Effective From:</b>	September 2005
<b>Next Review:</b>	August 2016
<b>Modified:</b>	

Reviewed August 2006. Reviewed August 2011, replaced 'student' with 'learner', 'course' with 'programme' as per current norms. Reviewed August 2012, no change. Reviewed August 2013, no change. Reviewed August 2015, no change.

### 1. Objectives

1.1 To set down the code of conduct expected of the College's learners

1.2 To highlight what is considered misconduct under this code.

### 2. Scope

2.1 The College Learner Code of Conduct applies to all persons, other than staff, undertaking a programme of study or otherwise in attendance or in residence on the College's premises. In addition, these regulations apply to learners attending College programmes on other premises and to elected members of the Students' Union

- 2.2 This Learner Code of Conduct comes into force when an offer of a place in the College is accepted and remains in force whilst learners are attending the College or residing on its premises or taking part in any of its associated events.

### **3. Introduction**

- 3.1 The College aims to provide a safe and welcoming environment for its staff and learners. In order to achieve this, a standard of conduct is necessary on the part of learners and staff. This document outlines that standard of conduct in terms of the College's learners (as defined in 2.1 and 2.2)
- 3.2 The Learner Code of Conduct shall be included in the Learner Handbook and on the Learner Intranet
- 3.3 The Learner Code of Conduct is equally applicable to learners when they are off-campus, for example on a field trip or a work placement
- 3.4 The College is entitled to alter this Learner Code of Conduct from time to time through the Academic & Professional Council.

### **4. Learner Code of Conduct**

- 4.1 All learners are expected to be considerate to the needs of fellow learners, staff and any authorised visitors to the College
- 4.2 All learners are expected not to engage in any conduct which is intended or is likely to disrupt teaching, learning, study, research, ceremonies, recreational activities, meetings, examinations, administration or other activities undertaken by or within the College or organised as part of its approved activities
- 4.3 All learners shall take responsibility, within learner accommodation, for the actions of their invited guests
- 4.4 All learners are expected to respect the property of the College and not to use it for unapproved purposes
- 4.5 All learners are expected to attend classes and commit to the learning process.

### **5. Learner Misconduct**

- 5.1 The essence of misconduct under the Learner Code of Conduct is improper interference with the proper functioning or activities of the College, or those who work or study in the College, or action which otherwise damages the College
- 5.2 The following shall constitute examples of misconduct. This list is not intended to be exhaustive:

- 5.2.1 Disruption of, or improper interference with, the academic, administrative, sporting, social or other activities of the College, whether on College premises or elsewhere
- 5.2.2 Obstruction of, or improper interference with, the functions, duties or activities of any learner member of staff or other employee of the College or any authorised visitor of the College
- 5.2.3 Violent, indecent, disorderly, threatening or offensive behaviour or language whilst on College premises or engaged in any College activity
- 5.2.4 Fraud, deceit, deception or dishonesty in relation to the College or its staff or in connection with holding any office in the College or in relation to being a learner of the College
- 5.2.5 Action likely to cause injury or impair safety on College premises
- 5.2.6 Sexual or racial harassment of any learner, member of staff or other employee of the College or any authorised visitor to the College, or any behaviour of a hostile or intimidatory nature aimed at individuals or groups of people
- 5.2.7 Examination offences which do not constitute academic irregularities
- 5.2.8 Damage to, or defacement of, College property or the property of other members of the College community caused intentionally or recklessly, or misappropriation of such property
- 5.2.9 Misuse or unauthorised use of College premises or items of property, including computer / network misuse
- 5.2.10 Conduct which constitutes a criminal offence where that conduct:
  - 5.2.10.1 takes place on College premises, or
  - 5.2.10.2 affects or concerns other members of the College community, or
  - 5.2.10.3 damages the good name of the College, or
  - 5.2.10.4 itself constitutes misconduct within the terms of this code, or
  - 5.2.10.5 is an offence of dishonesty, where the learner holds an office of responsibility in the College
- 5.2.11 Breaches of the subsidiary codes (e.g. Library regulations) where the behaviour complained of cannot be dealt with satisfactorily under those codes
- 5.2.12 Behaviour which brings the College into disrepute
- 5.2.13 Failure to comply with proper directions given by an officer or employee of the College

5.2.14 Failure to comply with a previously imposed penalty under this Learner Code of Conduct.

## **6. Breaches of the Learner Code of Conduct**

6.1 A learner who is suspected of breaching the Learner Code of Conduct shall be subject to the College's Learner Disciplinary Procedure (QA J5).

### **Student Charter**

#### **Griffith College Dublin**

##### **Quality Assurance Policies, Procedures, Practices and Guidelines**

<b>Title:</b>	Learner Charter
<b>Document No:</b>	QA J1
<b>Issue Version:</b>	1.0
<b>Issue Date:</b>	17.06.05
<b>Related Documents:</b>	Fulfilling the Learner Charter: The Role & Responsibilities of Learners and the College (QA J2)
<b>Circulated for comment to:</b>	Academic & Professional Council
<b>Responsible for Implementation:</b>	All Staff
<b>Next Review:</b>	August 2016

#### **Modified:**

Reviewed August 2012, replaced 'student' with 'learner'. Reviewed August 2012, no change. Reviewed August 2013, no change. Reviewed August 2015, no change.

### **1. Objective**

1.1 To set out the College's agreed Learner Charter.

### **2. Scope**

2.1 The Learner Charter applies to learners of all College campuses.

### **3. Learner Charter**

3.1 Griffith College is committed to:

- 3.1.1 Providing excellent teaching and educational resources to enable learners realise their chosen personal and career ambitions
- 3.1.2 Promoting an attainment culture whereby learners are encouraged to give of their best
- 3.1.3 Publicly recognising and celebrating the successes of our learners in national and international activities
- 3.1.4 Providing a welcoming and nurturing environment where all learners are treated with respect and dignity
- 3.1.5 Supporting and guiding learners in their academic and personal development towards their educational and personal goals
- 3.1.6 Embracing the diversity of our learners through full inclusion and through the provision of equal opportunities for advancement to all
- 3.1.7 Providing equality of educational opportunity regardless of personal characteristics and differences
- 3.1.8 Providing for continuous improvement through the active consideration of feedback from learners, staff, alumni, employers and other external stakeholders.

## Appendix 6: Windmill Lane Music Production / Recording Equipment

### 1 Labs 1 - 5

- 60 x Dual core pc's running ProTools, Reason, Ms Office and a 50 Gb Sfx Library
- 9x Intel core 2 duo iMacs running ProTools, Reason, Logic, Ms Office and a 50 Gb Sfx Library.
- 27x Digidesign Mbox 2's.
- Projector, screen and 2 KRK Rokit 8 Monitors.

### 2 Studio 4

- 24 channel Spirit Ghost analogue console
- Digidesign 002 interface
- Intel core 2 duo iMac running ProTools, Reason, Logic, Office and a 50 Gb Sfx Library.
- 2x Yamaha ns10 Reference Monitors with Quad Amplifier.
- 2x Alesis 3630 Dual Channel Compressors
- 1x Tc Electronic m350 FX unit
- 1x TL Audio ivory valve channel strip
- 1x Alesis Midiverb 5
- 1x Behringer 4 channel headphone amp
- 2x Shure sm57
- 1x Shure sm58
- 2x Audio Technica at208's
- 2x Se electronics 1a's Condenser mics

### 3 Classroom:

- 1x Intel core 2 duo mac pro running ProTools, Reason, Logic, Office
- 1x power pc mac g4 running Pro tools, Reason and smart.
- Mackie vlz 16 channel console
- 2x M-Audio bx 8 reference monitors
- 2x screen and projector
- Seating for 48

### 4 Microphones:

- 2x Neumann u87's
- 2x B&K 4006's
- 2x AKG 414's
- 2x Nuemann km 184's
- 2x AKG 451's
- 2x AKG 214's
- 3x Shure sm57's
- 2x Shure beta 58's
- 3x Sennheiser 421's
- 1x EV Re27
- 1x Shure 55s
- 2x Crown PZM's
- 1x Yamaha SubKick

- 1x AKG c3000

#### **5 Mac Lab:**

- 16x Intel core 2 duo iMacs running ProTools, Reason, Logic, Final Cut Pro and Office
- 1x Power mac pro running ProTools hd1
- 1x Digidesign 96 Interface
- 1x Digidesign Sync
- 2x Genelec 8020 Monitors
- 16x Avid Mbox 3's
- Projector and screen

#### **6 Post Room:**

- 1x MacPro running ProTools hd1, Reason, logic, Final Cut Pro and Office
- 2x Genelec 8020's
- 1x Digidesign 96 Interface

#### **7 Windmill Studio1:**

- 72 ch Neve VR Legend Console with Flying Faders and Total Recall
- ProTools HDx
- 24 Track Studer Tape Machine
- Intel Mac Pro
- 4x Digidesign 192 interfaces
- Digidesign Sync
- Custom Genelec Main Monitors
- Dynaudio BM15 monitors
- Yamaha ns10 monitors
- 4x Urei 1176's
- 1x Urei 1178
- Summit Audio EQ
- Tubetech Stereo compressor
- 2x EAR eq's
- 1x Avalon 737 valve channel strip
- 1x Distressor
- 1x DBX 160s
- 1x DBX 165
- Lexicon 960 Digital Effects unit
- Lexicon 480 Digital Effects Unit
- Lexicon PCM 90
- AMS RMX 16
- AMS DMX Delay
- TC Electronic m5000
- Eventide H3000
- Eventide Eclipse
- EMT Plate Reverb
- Hear Technologies Hearback Monitoring system
- Steinway Grand Piano
- Hammond Organ with Lesley
- Harmonium
- Microphones:

- 1x Brauner VM1
- 3x Neumann U47FET
- 2x AKG C12VR,
- 1x Neumann M149
- 2x Coles 4038
- 2x AEA R84 with ribbon mic pre
- 3x Brüel and Kjaer (BandK) 4006s
- 2x AKG 414 B-ULS
- 2x AKG 414 EB
- 3x Neumann U87
- 1x Neumann U87a
- 1x Neumann U87i
- 3x Neumann TLM 170
- 3x KM 184
- 3x KM 84i
- 5x AKG C460B
- 4x AKG C451E
- 1x AKG C451EB
- 1x AKG C1000
- 1x AKG D112
- 1x AKG D12
- 2x Beyerdynamic M201
- 1x Beyerdynamic M88
- 1x Sennheiser MKH 80
- 5x Sennheiser 421
- 4x Earthworks TC30K
- 4x EV 408
- 1x EV PL6
- 1x EV RE20
- 2x Crown PZM
- 4x Shure SM 57
- 1x Shure SM 7

#### **8 Windmill Studio 2:**

- 40 Ch SSL SL4000G+ Console
- Quested VS2108a Main Monitors
- Genelec 8040a Monitors
- ProTools HDx
- PowerMac Pro
- 3x Digidesign 96 Interfaces
- 1x Digidesign Sync
- 1x Urei 1176
- 2x Distressors with British Mod and stereo link
- 1x Transient Designer
- 1x DBX 160 s
- 1x LA Classic stereo valve compressor
- 2x Vintech X73i Preamps
- 1x Avalon 737 Channel strip
- 1x Drawmer 1960 Dual Valve Pre



- 1x Drawmer 1961 Dual Valve EQ
- 1x Avalon AD2055 Dual EQ
- 1x SPL De-Esser
- 1x Lexicon PCM90
- 1x TC Electronic M5000
- 1x Eventide H3000
- 1x TC Electronic 2290 Delay
- 2x QSC Headphone amps

#### **9 Windmill Studio 3:**

- Digidesign Pro Control Surface
- Pro tools hdx
- 1x Digidesign 96 Interface
- 1x Digidesign Sync
- 1x Blackburst Generator
- 1x Avid Mojo
- Custom Genelec 5.1 Monitoring with Sub
- Power Mac Pro
- Focusrite Trackmaster Pro Preamp
- Samson 4 Channel Headphone amp

#### **10 Pod 1:**

- 1x Intel Core2 duo iMac running ProTools, Reason, Logic, Final Cut
- M – Audio BX 5 Monitors
- Digidesign Control 24

#### **11 Pod 2:**

- 1x Intel Core2 duo iMac running ProTools, Reason, Logic, Final Cut
- M – Audio BX 5 Monitors

#### **12 PA System**

- 2 x Meyer Sound UPJ 1P Speakers
- 2 x Meyer Sound M1D Sub-woofers
- 1 x 24 ch Midas Venice console
- 1 x DBx Loudspeaker management system
- 1 x Klark Technik stereo Graphic Equaliser
- 2 x 'The Box' active stage monitors
- 1 x Dreitech 24 way multi-core loom.