

PROGRAMME SPECIFICATION

Awarding body/institution	Glyndŵr University
Teaching institution (if different from above)	
Details of accreditation by a professional, statutory or regulatory body (including link to relevant website)	N/A
What type of accreditation does this programme lead to?	N/A
Is accreditation in some way dependent on choices made by students?	N/A
Final award/s available eg BSc/DipHe/CertHE	BSc (Hons) Music Technology BSc Music Technology Diploma of HE in Music Technology Certificate of HE in Audio Technology
Award title	BSc (Hons) Music Technology
JACS 2 code	J930
UCAS code (to be completed by admissions)	J931
Relevant QAA subject benchmark statement/s	Communication, media, film and cultural studies (2008)
Other external and internal reference points used to inform the programme outcomes	
Mode/s of study (p/t, f/t, distance learning)	Full Time
Language of study	English
Date at which the programme specification was written or revised	Approved July 2010 Updated March 2013

Criteria for admission to the programme

The programme is subject to Glyndŵr University's Principles, Policies, Regulations and Procedures for the Admission of Students to undergraduate programmes and will take account of University policy and guidelines for assessing accredited prior learning (APL) or accredited prior experiential learning (APL).

Typical requirements:

Entrance requirements have been set at the level of 240 UCAS points through any or a combination of the following:

2 GCE/VCE A-levels, 6 unit awards, VCE 12 unit double award or equivalent

A-Levels to be in a relevant subject such as Media/ Creative Technology/ Music Technology/ Science/ Maths/ Physics.

National Diploma/Certificate in a relevant area such as Media/ Creative Technology/ Music Technology/ Science based subject

AGNVQ/GNVQ III - Merit

ACCESS course pass

3-4 Scottish Higher subjects

3-4 Irish Leaving Certificate Higher subjects.

All applicants are invited to tour the facilities to ensure that the course they are applying for meets their expectations. The programme content is discussed with applicants during their tour period.

Students will be accepted onto the programme in order of application and on meeting the required entry criteria.

Exceptional Entry / Widening Access

Glyndŵr University is committed to the principle of lifelong learning and to widening access particularly to those groups who have not traditionally accessed higher education. To this end applications from prospective students who do not meet the formal educational qualifications for entry will be considered on an individual basis.

Such applicants will be expected to demonstrate through interview that they have the potential to succeed on the course. The Personal Development Module delivered in Year 1 will be used as a means of ensuring that students who enter through this route are provided with the appropriate skills development opportunities and support from the Team.

Aims of the programme

To produce graduate students with the knowledge, tools and competencies to enable a successful career within the broad and creative area of the Music Technology Industry.

To enable the student to exploit and engage their understanding of new and emergent Music Technology media forms and their relation both to their industrial application, social context and to earlier forms.

Provide a depth of critical understanding of key production processes and professional practices relevant to Music Technology, media, cultural and communicative industries, and of ways of conceptualising creativity and authorship. Associated with a learning environment that enables professional media products to be developed

Enable the students to produce work showing capability in operational aspects of music technology, production technologies, systems, techniques and professional practices

To engage the students with the methodologies of how, in creative industries, individuals or collaborative project-oriented teams are organised, enabling the student to have a competitive standing in the employment market.

Distinctive features of the programme

The BSc (Hons) Music Technology degree offers the student the opportunity to develop music technology knowledge which is specific to this modern, rapidly changing industry. The industry has evolved such that it depends on a highly technical base of operation and equipment. The degree offers the student the delivery of a modern curriculum aligned with current developments within the industry. The degree also offers the student the opportunity to develop emerging skills that will be adopted within the industry in the future. These modules are based on active research by academics who are also current practitioners within the industry.

The programme will give the student the exit profile that has been developed through the delivery of the programme. The profile will be an independent music technologist with a strong understanding of the market in which Music Technology lies. This market is not as clear as it once was due to the convergent nature of the creative industries and the practitioner's ability to work across industry boundaries. The student will have developed in an area of this market and display current knowledge and technical skills to compete with their peers.

Programme structures and requirements, levels, modules, credits and awards

Glyndŵr // Creative Media Technology BSc(Hons) Music Technology												
Code	Module Title	Credits	Level	Trimester	Core	Option						
CMT101	Professional Studies 1	20	4	1	V							
CMT103	Audio Science	20	4	1	V							
CMT107	Recording Technologies 1	20	4	1	V							
CMT403	Live Sound	20	4	2	V							
CMT102	Sound Synthesis and Sampling	20	4	2	V							
CMT402	Radio Production 1	20	4	2								
CMT104	Desktop Audio Technology	20	4	2	V							
CMT506	Theatre Technology	20	5	1	V							
CMT204	Music Production	20	5	1	V							
CMT507	Compositional Technologies	20	5	1	V							
CMT503	Impact of New Technology	20	5	2	V							
CMT205	Computer Music Programming	20	5	2	V							
CMT207	Recording Technologies 2	20	5	2		V						
CMT502	Broadcasting Standards	20	5	2		✓						
CMT602	Collaborative Performance	20	6	1	✓							
CMT601	Audio Post Production	20	6	1	V							
CMT604	Location Recording	20	6	2	V							
CMT603	Live Systems	20	6	2	✓							
CMT305	Project	40	6	1 & 2		V						
CMT306	Dissertation	40	6	1 & 2		✓						

Exit awards

Students who successfully complete 120 Level Four credits but are unable to continue on the programme may be awarded the Certificate of HE in Audio Technology as an exit award.

Similarly, students who successfully complete 120 Level Four and 120 Level credits but are unable to continue on the programme may be awarded the Diploma of HE in Music Technology as an exit award.

For students that have acquired 120 Level Four and 120 Level Five credits but who are unable to complete to Honours, may be awarded a BSc Music Technology provided they have successfully completed at least 60 Level Six credits.

Intended learning outcomes of the programme

Students progressing through the programme should demonstrate knowledge and skills as follows:

Level Four:

A Knowledge and Understanding

- A1 Theory : core concepts, principles and theories relevant to the Music Technology industry
- A2 Techniques: methods, tools and enabling technologies used in the area of creative Music Technology
- A3 Applications: applications of techniques developed within music technology
- A4 Professional Issues: Basic legal and ethical issues relating to the use of technology developed within Music Technology

B Intellectual/Cognitive Skills

- B1 Basic understanding of the techniques that relate to the Music and Audio industry
- B2 Be aware of problems and recognise opportunities to apply solutions
- B3 Construct arguments that incorporate specialised Music Technology knowledge
- B4 Include the contents of articles and other sources, and display understanding of their relative importance and relevance to an area of study

C Practical Skills

- C1 Utilise a range of techniques, support tools and development environments
- C2 Produce work demonstrating music-technical ability and appropriate manipulation of audio material
- C3 Work as a member of a team, contributing to the execution of a shared design and implementation task
- C4 Undertake and report a self-directed individual programme of investigation

- D1 Communication: prepare written reports and oral presentations using appropriate language.
- D2 IT Skills: Retrieve information using internet, browsers and catalogues; use IT facilities to prepare portfolio of work.
- D3 Numeracy: Develop basic music mathematical skills in the processes lab development
- D4 Problem Solving: describe practical problems and offer potential solutions.
- D5 Working with Others: engage with team projects using available support tools; explore working as part of a team.
- D6 Self Learning: Organise activity and manage time throughout the modular programme

Level Five

A Knowledge and Understanding

- A1 Theory: current concepts, principles and theories relevant to the Music Technology industry
- A2 Techniques: methods, tools and enabling technologies used in the area of creative Music Technology
- A3 Applications : established applications of techniques developed within music technology
- A4 Professional Issues: Discuss legal and ethical issues relating to the present and future use of technology developed within Music Technology

B Intellectual/Cognitive Skills

- B1 Evaluate and apply judgement to the techniques that relate to the Music and Audio industry
- B2 Analyse problems and recognise opportunities to apply appropriate techniques to their solution
- B3 Apply informed and reasoned arguments, descriptions and proposals that incorporate Music Technology knowledge
- B4 Interpret the contents of articles and other sources, and form a judgement of their relative importance and relevance to an area of study

C Practical Skills

- C1 Make effective use of a range of techniques, support tools and development environments
- C2 Produce work demonstrating Music technical expertise and manipulation of audio material
- C3 Work as a member of a development team, contributing to the planning and execution of a shared design and implementation task
- C4 Plan, undertake and report a self-directed individual programme of investigation, design and implementation

- D1 Communication: Communicate effectively in written reports and oral presentations using appropriate terminology and technical language
- D2 IT Skills: Retrieve information using search engines, browsers and catalogues; use appropriate IT facilities to prepare and present Music/audio/visual projects.
- D3 Numeracy: Use mathematical techniques in the process of design
- D4 Problem Solving: Analyse practical problems and design effective solutions
- D5 Working with Others: Plan team projects using available support tools; work effectively as part of a team
- D6 Self Learning: Organise activity and manage time in a programme of self-directed study

Level Six (Ordinary)

A Knowledge and Understanding

- A1 Theory : current and emerging concepts and principles relevant to the Music Technology industry
- A2 Techniques: Advanced application diagnostic methods, tools and enabling technologies used in the area of creative Music Technology
- A3 Applications : utilise specialised skills to evaluate established and potential applications of emerging techniques developed within music technology
- A4 Professional Issues: Critically reflect on legal and ethical issues relating to the present and future use of technology developed within Music Technology

B Intellectual/Cognitive Skills

- B1 Evaluate and apply informed judgement to the theories and techniques that relate to the Music and Audio industry
- B2 Analyse problems and recognise opportunities to apply specialised techniques to their solution
- B3 Apply informed and reasoned arguments, descriptions and proposals that incorporate specialised Music Technology knowledge
- B4 Interpret the contents of articles and other sources, and form an informed judgement of their relative importance and relevance to an area of study

C Practical Skills

- C1 Make effective use of a range of theories, techniques, support tools and development environments
- C2 Produce work demonstrating music technical expertise and judicious manipulation of audio material
- C3 Work as a member of a development team, contributing to the planning and execution of a shared design and implementation task
- C4 Propose, plan, undertake and report a self-directed individual programme of investigation, design and implementation

- D1 Communication: Communicate effectively in written reports and oral presentations using appropriate terminology and technical language
- D2 IT Skills: Retrieve information using search engines, browsers and catalogues; use appropriate IT facilities to prepare and present Music/audio/visual projects and artefacts in various formats (documents, oral presentations)
- D3 Numeracy: Use mathematical techniques in the processes of analysis and design
- D4 Problem Solving: Analyse problems and design effective solutions
- D5 Working with Others: Plan and manage team projects using available support tools; work effectively as part of a team
- D6 Self Learning: Organise activity and manage time in a programme of self-directed study

Level Six (Honours)

A Knowledge and understanding

- A1 Theory: Research current and emerging concepts, principles and theories relevant to the Music Technology industry
- A2 Techniques: Advanced application diagnostic methods, tools and enabling technologies used in the area of creative Music Technology
- A3 Applications : utilise specialised skills to evaluate established and potential applications of emerging techniques developed within music technology
- A4 Professional Issues: Critically reflect on legal and ethical issues relating to the present and future use of technology developed within Music Technology

B Intellectual/Cognitive Skills

- B1 Evaluate and apply critical judgment to the theories and techniques that relate to the Music and Audio industry
- B2 Analyse problems and recognise opportunities to apply advanced specialised techniques to their solution accept responsibility for suggestions and directives
- B3 Construct informed and reasoned arguments, descriptions and proposals that incorporate specialised Music Technology knowledge
- B4 Interpret the contents of journals/articles and other sources, and form a critical judgment of their relative importance and relevance to music technology

C Practical Skills

- C1 Display significant and effective use of a range of advanced theories, techniques, support tools and development environments
- C2Produce work demonstrating advanced music technical expertise and judicious manipulation of audio material
- C3 Work as a member of a development team, contributing to the planning and execution of a shared design and implementation task Apply diagnostic techniques to enable team work.
- C4 Propose, plan, undertake and report a self-directed individual programme of investigation, design and implementation

- D1 Communication: Communicate effectively in written reports and oral presentations using appropriate terminology and technical language, display a coherent body of knowledge.
- D2 IT Skills: Retrieve information using search engines, browsers and catalogues; use appropriate IT facilities to prepare and present music/audio/visual projects and artifacts in various formats (documents, oral presentations)
- D3 Numeracy: Use mathematical techniques in the processes of analysis and design
- D4 Problem Solving: Analyse complex problems and design effective solutions, take responsibility for decision making
- D5: Working with Others: Plan and manage team projects using available support tools; work effectively as part of a team
- D6 Self Learning: Critically review and organise activity and manage time in a programme of self-directed study

CURRICULUM MATRIX demonstrating how the overall programme outcomes are achieved and where skills are developed and assessed within individual modules.

Glyndŵr // Creative Media BSc(Hons) Music Technology																			
Technology																			
Code	Module Title	A1	A2	АЗ	A4	B1	B2	ВЗ	В4	C1	C2	С3	C4	D1	D2	D3	D4	D5	D6
CMT101	Professional Studies 1	Х		Χ	Χ	Χ		Χ	Х			Χ	Χ	Χ	Χ	Х			Х
CMT103	Audio Science	Х		X		Х	Х			Χ		Х		Х		Χ	Х	Х	
CMT107	Recording Technologies 1	Х	Х	Χ			Х			Χ									Х
CMT403	Live Sound	X	X				Х	Х	Х	Χ	Х				X	Χ	Х		Х
CMT102	Sound Synthesis and Sampling	X	X	X		Х	Х		Х	Χ	X				X	Χ			
CMT402	Radio Production 1	X	Х		X			X	X		X		X		X			X	X
CMT104	Desktop Audio Technology		X				X			Χ									Х
CMT506	Theatre Technology	X	Х			Х				Χ					Х	Χ			
CMT204	Music Production	X		Х	Х			Х	Х				Х	Χ	Х		Х		Х
CMT507	Compositional Technologies	X	Х	Х		Х	Х		X	Χ	Χ				Х	Χ		X	
CMT503	Impact of New Technology	X		X	X			Х	Х				Χ	Χ	Х		Х		Х
CMT205	Computer Music Programming			Χ				Х			Χ				Х	Χ	Х		Х
CMT207	Recording Technologies 2	Х	Χ	Х		Χ	Χ		Х	Х	Χ				Х	Χ		Х	Х
CMT502	Broadcasting Standards				Χ		Х		Х				Х		Х				Х
CMT602	Collaborative Performance	Х		X		X	X		X	X	X				X	X	X	X	Х
CMT601	Audio Post Production	Х	Χ	Х		Χ	Χ		Χ	X	Χ				Χ	Х	Χ	X	Х
CMT604	Location Recording	Х	Х	Χ			X			Х	X			X			Χ		Х
CMT603	Live Systems	X			X		X		X		Χ			X				X	Х
CMT305	Project	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X
CMT306	Dissertation	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X

Learning and teaching strategy used to enable outcomes to be achieved and demonstrated

To be able to deliver courses relevant to the Music Technology Industry, the mode of delivery will continue to be flexible in order to be accessible. Presenting an infrastructure that is similar to that found within the industry will be a key opportunity for the development of flexible learning that matches the expectations of the new convergent digital technology industry.

Considerable expertise has been gained in the subject area of Audio/Radio Technology, the staff of which have been leading initiatives for degrees in the creative industries. This has proved that the implementation of campus-based work experience can successfully deliver the expected learning outcomes for the industry and offers continued development in this area due to the imminent construction of the new Creative Industries centre.

This will be further enhanced through the Learning, Teaching and Assessment strategy of any new course that is created for the centre as it will be possible to integrate blended learning from the conception of the new proposals. This will enable greater participation from students who are already in employment by introducing an element of flexibility in the timetabling of the delivery of modules.

The importance of learning communities has been addressed in the design and implementation of all modules within the audio area of the Department. This is evidenced in the development of a bespoke e-learning platform based upon the open source Moodle VLE. The platform that has been developed has been used as a pilot project to inform an institutional strategy. The VLE allows the creation of forums that are used to enhance the student experience and to also create an environment of instant communication between the cohort and teaching staff alike. Assessment and feedback/feedforward is enhanced through electronic delivery and submission through the VLE. This vehicle has received support from existing students and the alumni still engage with the team through the VLE: this represents an enhancement for the teaching and learning as current students have access to Alumni and the experience that they are gaining in the employment world.

The degree is full time and as such the programme team use the traditional week for academic delivery ie, Monday- Friday 9.00-5.30. Students are expected to be available throughout the above period. Level 4 students experience 16hrs/week of direct contact time. Delivered over a 4 day period.

Level 5 students experience 16 hrs/week of direct contact time. Delivered over a 4 day period. Level 6 students experience 12hrs/week of direct contact time. Delivered over a 4 day period.

The direct contact is supplemented by the scheduled availability of academic staff for support of the Dissertation/Project and tutorial sessions. Students are expected to use the facilities outside of the scheduled times above. The 24hr operation of the studio reflects the nature of the industry, students are required to book the studio to develop their professional and practical skills.

Students are given the opportunity to engage with extra curricular opportunities, the concept being to develop a professional portfolio of production pieces and a record of engagement with the industry. There are various methods for achieving this; The Total

Audio Society formed by the students gives an opportunity to apply skills that have been learnt in modules such as Recording Techniques. Live Sound and Audio Science, the society operates all live music within the Students Guild.

There is also the opportunity to engage with CalonFM a community radio station who reside within the Campus. The station gives a valuable platform for interaction with a professional broadcasting station.

Access to the learning and teaching resources outside of the traditional University hours is an established protocol for the Audio area. The Wall studio operates on a 24hr basis and this has proved beneficial for students and staff. The offering of an industry-style model gives the student the experience and realism of the area in which they intend to operate. The industry by nature is entrepreneurial and operates whenever there is the requirement for production work to be completed. The use of the radio station also gives the student the access to a broadcast medium to showcase the work outcomes. The development of the suite of facilities as a teaching and learning vehicle, integrated with professional applications is such that the team decided that examinations were not a suitable method for assessing the academic and professional skills gained by the students as they progress though the levels. It was decided that importance would be placed on timeliness of production, professional attitude, ability to articulate and pass on clear information within team settings. This manifests itself as the skills required to operate in a changing creative area. This work will be developed further now the member of staff seconded to the Liverpool Capital of Culture project has returned and can use the knowledge gained in managing interaction between participants of that project to enhance the Glyndŵr University development of creative projects.

Welsh Medium

Whilst students are entitled to submit assessments in Welsh, the programme will be delivered through the medium of English.

Assessment strategy used to enable outcomes to be achieved and demonstrated

Assessment methods across all modules relate directly to learning outcomes through the emphasis on assessment of the audio output, in terms of:

The quality of the final audio product, in terms of creativity, originality, technical proficiency, use of technology and language;

accompanying evidence of creative and technical processes leading to the realisation of the final product (drafts, annotations, evidence from Process Journals, etc);

evidence that audience, reader or client considerations have been addressed, and that it is fit for the purpose for which it is intended; evidence of self-critical and positive reflection at various stages of the BSc (Hons) Music Technology process.

The team apply a range of assessment approaches, to reflect the nature of the creative industry. By bringing in some self-assessment, peer-assessment and group assessment the student will develop self reflection and moderation of thought, which are both skills required for Music Technology. This can be achieved both within the traditional assessment formats such as essays and reports, but is more often introduced beyond these traditional

formats, including the assessment of:

presentations;

posters;

performances:

portfolios of evidence;

reflective logs;

artifacts such as DVD's; Webcasts; Video Production, and so on;

Assessment is not only intended to validate the student knowledge at an appropriate level to their level of study, but is also designed to give incremental support. Differing styles of assessment are time-released through the VLE (virtual learning environment). Therefore students have access to a resource that issues the information at the correct time to support relevant curriculum areas.

Formative assessment helps to develop student style and is found to be supportive and developmental. It is delivered by feedback through the tutorial process; the student will present, typically, an outline summary of intended submission. By discussion with the tutor, suitable guidance is intended to be developmental and not merely incremental. The enabling process gives guidance for summative assessment, which provides a measure of student performance or level against the defined outcomes.

Assessment formats for all modules are based on exercises, journals and logs in addition to the written pieces of work submitted for assessment. Submission of portfolios and all assessed work is timed to avoid the bunching of assessment.

Feedback with respect to formally submitted work will normally be within 15 working days from the formal submission date

Assessment regulations that apply to the programme

University regulations for Bachelor Degrees Diplomas, Certificates and Foundation Degrees will apply to this programme.

Programme Management

The programme will be managed under the auspices of the Department of the Creative Industries.

The course will be informed by data such as the National Student Survey (when the final year is reached). Each programme within the Department nominates student representatives and the VLE is used to interact with the student cohort and to perform part of the function of the Staff Student Consultative Committee (SSCC); routine physical SSCC meetings also occur each semester , chaired by an external member of staff from outside the area. Students are also asked to undertake module evaluation and programme evaluation via the VLE and this feedback is also used to inform the annual monitoring report: students receive responses via the VLE.

Programme meetings are held bi-monthly. Despite the small size of the audio team, all of its members have ex-officio places on the Academic Subject Board, by virtue of memberships

of a range of university-level committees: this in turn ensures that members are well-informed about developments and good practice. Student involvement in the Department's deliberations is currently informal, through ad hoc discussions and online contributions through the richly-interactive Moodle VLE, which the audio team has pioneered.

However, there is a designated Programme Leader for the degree programme who will be responsible for gathering data and writing the Annual monitoring report and for the day-to-day running of the programme, including the following:

- The management and development of curriculum and the course portfolio.
- Student tracking and student records.
- Collation of assessment data, presentation of data at assessment boards.
- Management/co-ordination of overall assessment activities across the programme, in association with the Department assessment co-ordinator.
- Liaison with external bodies and agencies,
- Quality assurance and annual monitoring, including compilation of the Annual Monitoring Report.
- Co-ordination of admissions activities and other recruitment activities, including relevant publicity activities.
- Student liaison, including involvement in team meetings for the new programme.

At module level there is devolved responsibility for the following:

- The maintenance and development of teaching and learning materials for all students enrolled on the module.
- The publishing and updating of module timetables, which shall include a weekly schedule of module sessions and required reading, to be distributed to students at the start of all modules.
- The setting, marking and collation of marks for all module assessments and examination papers, including re-sit assessments, and submission of student results to the Programme Leader.
- Tutorial support for students taking the module for which they are responsible.
- Quality monitoring, including processing of annual student feedback questionnaires and, where appropriate, student feedback for individual modules.
- Liaison with part-time members of staff involved in module teaching.

Particular support for learning

Students studying within Audio have a range of support mechanisms available to them. These are explained and offered from before the student joins the course. The process starts from the first contact or expression of interest.

The induction process introduces the student to the range of support offered by the audio team and Glyndŵr University. Sessions are offered with regard to finance, additional learning needs, time management, and learning enhancement, including numeric or language skills.

The audio team offers support mechanisms through the VLE as well as allocating each student a personal tutor, someone they can turn to to ask for direction.

If any issues develop that cannot be facilitated within the audio Department.

Students are invited to be represented at Department and University level so that they have the opportunity to have their views represented and responded to. The VLE forum also offers this function, with student response being timely, much of the time outside of the times they would get a response by internally waiting for a committee to sit.

The students regard this now as the norm and they use the interaction available to them to enhance their course of study. Many attend extra-curricular events that are organised generally on a weekly basis with many of the audio staff attending events that run until late in the night. This extra function develops the students socially and technically as they relish the time available to develop the skills to operate in a live environment.

Equality and Diversity

The University has adopted a policy of providing equal opportunities for all its students, staff, applicants and others involved in its work. One aspect of this policy is its intention to prevent, as far as possible, the harassment of one person by another, whether on the basis of gender, sexual orientation, sexuality, race or ethnic origin, religion, disability, or any other personal attributes or views held by the person harassed.

As part of the University's Disability Policy, students with a physical disability or learning difference are encouraged to contact the University Disability Adviser to ensure their needs are acknowledged formally. The outcome of such an assessment could result, for example, in additional time being allowed for examinations, or the provision of further learning support.