

# Programme Specification Sound Engineering FdSc.

1. Qualification	2. Programme Title	3. UCAS Code	4. Programme Type
FdSc Sound Engineering and Design	Sound Engineering and Design	H341	Modular – Single, Full time
<b>5. Main Purposes and Distinctive Features of the Programme:</b>			
<ul style="list-style-type: none"> <li><i>To provide students with a broad based education in the design, development and application of technologies and concepts to the field of Sound engineering and design</i></li> <li><i>To equip students with the skills and knowledge necessary to pursue a successful career in the music industry and to include vendor-based qualifications and certification</i></li> <li><i>To develop in students an ability to design, produce and market musical and sampled materials</i></li> <li><i>To promote in students a capability to adapt to a rapidly changing dynamic working environment</i></li> </ul>			
<b>Special Features</b> <ul style="list-style-type: none"> <li>Vendor specific and accredited qualifications encompassed on the teaching and learning of studio design and musical production</li> <li>Extensive practical activities using stat-of-the-art, purpose-built recording studios, booths and live performance equipment</li> <li>Personalised learning programs through optional module selection at HE5 .</li> <li>Work-based assessed and supported placements in a commercial recording studio</li> <li>Business and management issues specific to the music and related industries</li> <li>The choice of completing either an individual or group final year project, The group project may be with students from other pathways such as Film production for the music and Advertising Industries or Music and Creative Business Industries</li> </ul>			
<b>6. What a graduate should know and be able to do on completion of the programme</b> <p>To gain the qualification the learner will have demonstrated:</p>			
<b><u>Knowledge and understanding in the context of the subject(s)</u></b>	<b><u>Subject-specific practical/professional skills</u></b> <ul style="list-style-type: none"> <li>S1 Demonstrate knowledge and understanding of the physical and engineering basis of synthesis and sampling methods</li> <li>S2 Demonstrate practical abilities with synthesizers, MIDI protocols and sampling techniques</li> <li>S3 Demonstrate procedures and techniques for post production</li> <li>S4 demonstrate competence in the utilisation of sound processing software appropriate to a range of multimedia applications</li> <li>S5 appreciate the needs and aspirations of management, colleagues, the work force, members of the public, customers and representatives of other companies</li> <li>S6 Utilise techniques and technologies acquired on the programme in an industrial or commercial environment</li> <li>S7 Acquire knowledge and skills relevant to the subject area of the programme recognising the relevance of knowledge and skills acquired during the programme</li> </ul>		
<b><u>Cognitive skills in the context of the subject(s)</u></b> <ul style="list-style-type: none"> <li>C1 Assist in the evaluation of a given set of creative requirements within a set of applications</li> <li>C2 Interpret a specification</li> <li>C3 execute an implementation plan for a sound engineering project</li> <li>C4 Analyse appropriate approaches for a creative activity</li> <li>C5 Analyse and evaluate the characteristics of the range of equipment and setups</li> <li>C6 Identify and solve technical problems associated with the implementation of studio design and sound production</li> <li>C7 Relate the knowledge and skills obtained during the placement to new subject areas and disciplines</li> </ul>	<b><u>Other skills (e.g. key/transferable) developed in subject or other contexts</u></b> <ul style="list-style-type: none"> <li>O1 Competent in the use of information technology and computing facilities</li> <li>O2 Communicate effectively both orally and in writing</li> <li>O3 Ability to work independently and manage time and resources effectively</li> <li>O4 Life long learning skills/PDP</li> <li>O5 Carry out effective and targeted work placement</li> </ul>		

**7. Qualities, Skills & Capabilities Profile** The education and training goals of the programme seek to develop and demonstrate the following qualities, skills, capabilities and value in its graduates.

A) Cognitive	B) Practical	C) Personal & Social	D ) Other
Critical reasoning	Variety of IT related skills in computing, hardware, software and sampler configuration	Independence/self reliance	Awareness of contemporary issues in Creative Industries
Analytical ability and applied problem solving	Sound engineering application and design implementation	Self motivation and time management skills	Independent learning
Creative and flexible thinking	Artistic evaluation and implementation	Group and Team work	Information gathering and dissemination
Critical evaluation of new information or systems	Writing skills	Resourcefulness in dealing with challenging industrial briefs and issues perspectives	
	Oral communication and advocacy skills	Lifelong learning/PDP	
	Problem solving and project management and planning skills	Self evaluation and reflection	

**8. Duration and Structure of Programme/Modes of Study/Credit Volume of Study Units**

(18 Months Sound Engineering). Foundation Degree = 240 credits; Intermediate Awards of Diploma of Higher Education at 120 credits respectively.

FdSc. Sound Engineering and Design Honours students take 12 modules (6 at each level).

HE4 <b>Foundation Degree Modules</b>	<b>Core modules (20 credits each)</b> <ul style="list-style-type: none"><li>• Sound in Context</li><li>• Electronic Music: Theory and Practice</li><li>• The science of and the recording chain</li><li>• Studio Techniques</li><li>• Introduction to MIDI and synthesis</li><li>• Digital Sound Production</li><li>• Professional Development for the Creative Industries</li></ul>	<b>Option choices (20 credits each)</b> None.	
HE5 (Level2) <b>Foundation Degree Modules</b>	<b>Core modules (20 credits each)</b> <ul style="list-style-type: none"><li>• Post-production Techniques</li><li>• Work-based Learning</li><li>• Studio Design</li><li>• Electronic Composition</li><li>• Acoustics and experimentation</li></ul>	<b>Option choices (20 credits each)</b> Students choose TWO modules, from the following: <ul style="list-style-type: none"><li>• Analysis and Synthesis of Foley Effects</li><li>• Radio Active</li><li>• Advanced Studio Techniques</li></ul>	
<b>9. Learning, Teaching and Assessment Strategy</b>		<b>10. Other Information (including compliance with relevant University policies)</b>	
<p><b>Learning and Teaching Methods</b> A range of teaching and learning methods will be used: Lectures, seminars, tutorials, case study analysis, supported self study, problem solving exercises, guided reading, use of sound engineering systems.</p> <p><b>Assessment Methods</b> Assessment is linked to the learning outcomes of each module. Assessment methods will include; assignments, reports, case study analysis, both open and closed book examinations and project presentations.</p>		<p><b>Date programme first offered</b> September 2005</p> <p><b>Admissions Criteria</b> <b>Standard Requirements</b></p> <p><i>For September 2010 entry:</i></p> <ul style="list-style-type: none"> <li>• 120 UCAS points including an A2-level pass (or equivalent) in one of the following: a mathematical or physical science, a technology-based subject or music.</li> <li>• You should also have five GCSEs at grade C or above (or</li> </ul>	

<p><b>Assessment Classification System</b>            Pass mark for individual modules is 40%            All assessments for a module must be completed to a minimum pass standard.</p> <p><b>Honours Equivalent 1Classification Bands</b>            70% and above – First Class Honours            60 - 69% – Upper Second Class Honours            50 – 59% - Lower Second Class Honours            40 - 49% - Third class Honours</p>	<p>equivalent) including mathematics and English.</p> <p><i>For September 2011 entry:</i></p> <ul style="list-style-type: none"> <li>• 160 UCAS points from at least one, but preferably two, A2-levels (or equivalent) including one of the following: a mathematical or physical science subject, a technology-based subject or music.</li> <li>• You should also have five GCSEs at grade C or above (or equivalent) including mathematics and English.</li> <li>• Other equivalent qualifications, such as Scottish Higher passes, the Irish Leaving Certificate or International Baccalaureate</li> <li>• You May Be required to attend an interview</li> </ul> <p><b>Non Standard Entry</b>            Pass in a Kite-marked Access to Higher Education course, relevant life/work experience.</p> <ul style="list-style-type: none"> <li>• Mature student evaluation may include an interview and /or a diagnostic test</li> </ul> <p><b>Indicators of Quality and Standards</b>            External examiners            Benchmarking with similar programmes            National Benchmarking standards            Qualifying Law Degree</p>
---	---

---

1 There are no Classifications in foundation Degrees – these are placed here to help you identify with the standard marking criteria used throughout the University

## Appendix 2: General Assessment Criteria

### General Assessment Guidelines Level HE4

		Relevance	Knowledge	Argument/Analysis	Structure	Presentation	Written English	Research/Referencing
Class I (Exceptional Quality)	80%+	As for Class 1(70-79%) but exceptional work						
	70-79%	Directly relevant to title. Addresses most or all of the implications and assumptions of the title.	Demonstrates a thorough knowledge/understanding of theory and practice for this level through the identification and summary of the most important issues.	Makes creative use of appropriate arguments and/or theoretical models. Contains some distinctive or independent thinking. A comprehensive discussion of the material resulting in clear, logical conclusions.	Coherently articulated and logically structured. An appropriate format is used.	The presentational style & layout is correct for the type of assignment. Effective inclusion of figures, tables, plates (FTP).	A very well written answer with standard spelling and grammar. Style is clear, resourceful and academic.	Sources accurately cited in the text. A range of appropriate references cited in the reference list correct style.
Class II/i (Very Good Quality)	60-69%	Directly relevant to title. Addresses some of the implications of the issues addressed by the title.	Demonstrates a good knowledge/understanding of theory and practice for this level through the identification and summary of key issues.	Uses appropriate arguments or theoretical models. Clear and valid discussion of the material. Clear, logical conclusions.	For the most part coherently articulated and logically constructed. An appropriate format is used.	The presentational style & layout is correct for the type of assignment. Effective inclusion of FTP.	Well written with standard spelling and grammar. Style is clear and academic.	Sources accurately cited in the text and an appropriate reference list in the correct style is provided.
Class II/ii (Good Quality)	50-59%	Generally addresses the title and its implications, but sometimes addresses irrelevant issues.	Demonstrates an adequate knowledge/understanding of theory and practice for this level through the identification and summary of some key issues.	Provides a partly coherent argument, but lacking clear focus and consistency in places. Some issues lack clarity, or theoretical models expressed in simplistic terms. Conclusions are fairly clear and logical.	Adequate attempt at articulation and logical structure. An acceptable format is used.	The presentational style & layout is correct for the type of assignment. Inclusion of FTP but lacks selectivity.	Competently written with minor lapses in spelling and grammar. Style is readable and mainly academic.	Most sources accurately cited in the text and an appropriate reference list in the correct style is provided.
Class III (Satisfactory Quality)	40-49%	Some degree of irrelevance to the title. Superficial consideration of the issues.	Demonstrates limited knowledge/understanding of theory and practice for this. An attempt is made to identify key issues.	A basic argument is evident but lacks clarity and coherence. Issues are only vaguely stated. Conclusions are not always clear or logical.	Some attempt at articulation and logical structure. An acceptable format is used.	The presentational style & layout is largely correct for the type of assignment. Inappropriate use of FTP or not used where clearly needed to aid understanding.	Generally competent writing although intermittent lapses in grammar and spelling pose obstacles for the reader. Style limits communication and tends not to be academic.	Some relevant sources cited. Some weaknesses in referencing technique.
Borderline Fail	35-39%	Some significant degree of irrelevance to the title is common. Only the most obvious issues are addressed at a superficial level and in unchallenging terms.	Demonstrates weaknesses in knowledge of theory and practice for this level, with poor understanding of key issues.	Limited argument, which lacks clarity in places. Conclusions are neither clear nor logical.	Poorly structured. Lack of articulation. Format deficient.	For the type of assignment the presentational style &/or layout is lacking. FTP ignored in text or not used where clearly needed.	Deficiencies in spelling and grammar makes reading difficult. Simplistic or repetitious style impairs clarity.	Limited sources and weak referencing.

Fail	<34%	Relevance to the title is intermittent or missing. The topic is reduced to its vaguest and least challenging terms.	Demonstrates a lack of basic knowledge of either theory or practice for this level, with little evidence of understanding.	Severely limited arguments. Lacks clarity. Conclusions are sparse.	Unstructured. Lack of articulation. Format deficient	For the type of assignment the presentational style &/or layout is lacking. FTP as above.	Poorly written with numerous deficiencies in grammar, spelling, expression and style.	An absence of academic sources and poor referencing technique.
------	------	---	--	--	--	---	---	--

## General Assessment Guidelines Level HE5

		Relevance	Knowledge	Argument/Analysis	Structure	Presentation	Written English	Research/Referencing
Class I (Exceptional Quality)	80%+	As for Class 1 (70-79%) but exceptional work						
	70-79%	Directly relevant to title. Addresses most or all of the implications and assumptions of the title.	Demonstrates a wide knowledge/understanding of theory and practice for this level, through the identification and analysis of the most important issues and themes.	Makes creative use of appropriate arguments and/or theoretical models. Contains some distinctive or independent thinking. A comprehensive analysis of the material resulting in clear, logical conclusions.	Coherently articulated and logically structured. An appropriate format is used.	The presentational style & layout is correct for the type of assignment. Effective inclusion of figures, tables, plates (FTP).	A very well written answer with standard spelling and grammar. Style is clear, resourceful and academic.	Sources accurately cited in the text. A wide range of appropriate references cited in the reference list in the correct style.
Class II (Very Quality)	60-69%	Directly relevant to title. Addresses some of the implications of the issues addressed by the title.	Demonstrates a sound knowledge/understanding of theory and practice for this level through the identification and analysis of key issues and themes.	Uses appropriate arguments or theoretical models. Intermittent analysis of the material, with some descriptive or narrative passages. Clear, logical conclusions.	For the most part coherently articulated and logically constructed. An appropriate format is used.	The presentational style & layout is correct for the type of assignment. Effective inclusion of FTP.	Well written with standard spelling and grammar. Style is clear and academic.	Sources accurately cited in the text and a range of appropriate references cited in reference list in the correct style.
Class III (Good Quality)	50-59%	Generally addresses the title and its implications, but sometimes addresses irrelevant issues.	Demonstrates an adequate knowledge/understanding of theory and practice for this level, through the identification and analysis of the some key issues and themes.	Provides a coherent argument, but lacking clear focus and consistency in places. Some issues lack clarity, or theoretical models expressed in simplistic terms. Evidence of attempted analysis, with descriptive or narrative passages. Conclusions are fairly clear and logical.	Adequate attempt at articulation and logical structure. An acceptable format is used.	The presentational style & layout is correct for the type of assignment. Inclusion of FTP but lacks selectivity.	Competently written with minor lapses in spelling and grammar. Style is readable and mainly academic.	Most sources accurately cited in the text and an appropriate reference list in the correct style is provided.
Class IV (Satisfactory Quality)	40-49%	Some degree of irrelevance to the title. Superficial consideration of the issues.	Demonstrates limited knowledge/understanding of theory and practice for this level, with intermittent analysis of some key issues and themes.	An argument is evident but lacks clarity and coherence. Issues are only vaguely stated. Largely descriptive or narrative passages lacking clear analytical purpose. Conclusions are not always clear or logical.	Some attempt at articulation and logical structure. An acceptable format is used.	The presentational style & layout is largely correct for the type of assignment. Inappropriate use of FTP or not used where clearly needed to aid understanding.	Generally competent writing although intermittent lapses in grammar and spelling pose obstacles for the reader. Style limits communication and tends not to be academic.	Some relevant sources cited. Some weaknesses in referencing technique.
Borderline Fail	35-39%	Some significant degree of irrelevance to the title is common. Only the most obvious issues are addressed at a superficial level and in unchallenging terms.	Demonstrates weaknesses in knowledge of theory and practice for this level. Evidence of understanding of key issues is lacking.	Limited argument, which is descriptive or narrative in style with little evidence of analysis. Conclusions are neither clear nor logical.	Poorly structured. Lack of articulation. Format deficient.	For the type of assignment the presentational style &/or layout is lacking. FTP ignored in text or not used where clearly needed.	Deficiencies in spelling and grammar makes reading difficult. Simplistic or repetitious style impairs clarity.	Limited sources and weak referencing.
Fail	<34%	Relevance to the title is intermittent or missing. The topic is reduced to its vaguest and least challenging terms.	Demonstrates a lack of basic knowledge of either theory or practice for this level, with little evidence of understanding.	Inadequate arguments and no analysis. Conclusions are sparse.	Unstructured. Lack of articulation. Format deficient.	For the type of assignment the presentational style &/or layout is lacking. FTP as above.	Poorly written with numerous deficiencies in grammar, spelling, expression and style.	An absence of academic sources and poor referencing technique.

### Appendix 3: CURRICULUM SKILLS MAP

Modules	Learning to Learn	Communication	Group-work	Problem solving	Self Management	Use of IT	Numeracy
<b>LEVEL HE4</b>							
Sound in Context	DTA	TA	DT	T	DTA	DTA	
Electronic Music Theory and Practice	DTA	TA	DTA	TA	DTA	DTA	DTA
The science of the Recording Chain	DTA	DTA	DTA	DT	DTA	DTA	
Studio Techniques	TA	DTA		DTA	DT	D	DTA
Introduction to Midi and synthesis	DT	DTA	DT	DT	DTA		
Digital Sound Production	D	DTA	DT	DT	DTA	DTA	
Professional Development for the creative Industries	DTA	DTA	DTA	DTA	DTA	DTA	
<b>LEVEL HE5</b>							
Work based learning	DT	DTA	A	DT	A	A	D
Post-Production Techniques	DA	DTA	DTA	DA	DA	A	
Advanced Studio Techniques	DA	DTA	DT	TDA	DA	A	
Studio Design	DA	DTA	D	DTA	DTA	D	DTA
Radio Active	DTA	DTA	DT	DT	DTA	DTA	DT
Analysis and Synthesis of Foley Effects	D	DT	DTA	DTA	D	DTA	D
Acoustics and Experimentation	DT	DTA	DT	DTA	DA	DTA	DTA

T = taught

D = developed

A = assessed

## Appendix 4: ASSESSMENT SUMMARY TABLE

### FdSc Sound Engineering and Design

Modules	Core/ Option	Report	Practical	Examination	Presentation	Other
LEVEL HE4						
Sound in Context (SED1000)	Core	1 x 2000 = 50%		.		Listening Test = 50%
Electronic Music: Theory and Practice (SED1002)	Core	1 x 2000 = 30%	1x Composition = 50%	1		1 x System Configuration = 20%
The Science of Sound and the Recording Chain (SED1003)	Core		Signal Path Test = 70%	In class Test = 30%		
Studio Techniques (SED1004)	Core	1 x Log =20%	Live recording = 80%			
Introduction to Midi and Synthesis (SED1005)	Core		1x Composition = 70%	5 In class Tests = 30%		
Digital Sound Production (SED1006)	Core		1 x recording Test = 80%	Pro Tools 101 Certification = 20%		
Professional Development for the Creative Industries (SED1007)	Core	Individual Report = 70%			1 x Team Presentation = 30%	
LEVEL HE5						
Work Based Learning (SED2002)	Core	Proposal report= 15%  Student Report = 50%	Employer Report = 15%			Placement Officer Report = 20%
Post-Production Techniques (SED2003)	Core		Audio Project = 70%	In class Test = 30%		
Advanced Studio	Option	Research report	Audio Project =			Self evaluative report =

Modules	Core/ Option	Report	Practical	Examination	Presentation	Other
Techniques (SED2004*)		=10%	70%			20%
Studio Design (SED2005)	Core	Studio Design Project = 80%	Studio acoustic experiments = 20%			
Radio Active (SED2007*)	Option	1 x 2000 = 30%				Group work Broadcast = 70%
Analysis and Synthesis of Foley Effects (FPI2002*)	Option	1x 2500= 30%	1 x Composition = 30%			Sound Track analysis = 40%
Acoustics and Experimentation (SED2010)	Core	1 x 2500 = 50%	Experimentation design, implementation = 35%		Research proposal = 15%	

## Appendix 5: CURRICULUM OUTCOMES MAPS

### FdSc Sound Engineering and Design

Modules (* = Optional)	K1	K2	K3	K4	K5	K6	K7	S1	S2	S3	S4	S5	S6	S7	C1	C2	C3	C4	C5	C6	C7	O1	O2	O3	O4	O5
LEVEL HE4																										
Sound in Context (SED1000)	X			X							X				X	X			X				X	X	X	
Electronic Music: Theory and Practice (SED1002)	X		X	X				X	X										X			X	X	X	X	
The Science of Sound and the Recording Chain (SED1003)			X	X				X	X		X				X			X				X			X	
Studio Techniques (SED1004)								X	X	X	X					X	X		X				X			
Introduction to Midi and Synthesis (SED1005)		X	X					X			X				X	X							X	X	X	
Digital Sound Production (SED1006)	X		X	X					X	X									X	X			X	X	X	
Professional Development for the Creative Industries		X			X						X			X					X				X			
LEVEL HE5																										
Work Based Learning (SED2002)	X	X		X				X	X	X	X	X	X	X			X	X			X	X	X	X	X	
Post-Production Techniques (SED2003)											X	X	X						X	X	X	X	X	X		
Advanced Studio Techniques (SED2004*)											X	X	X	X			X	X				X				
Studio Design (SED2005)		X	X					X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	
Radio Active (SED2007*)	X	X		X							X			X		X			X	X			X	X		
Analysis and Synthesis of Foley Effects (FPI2002*)		X	X								X						X	X					X	X	X	X
Acoustics and Experimentation (SED2010)								X	X		X				X		X	X				X	X			

<b>Knowledge and Understanding in the Context of the Subject/s</b> <ul style="list-style-type: none"> <li>• K1 Contextualised historical understanding and evaluations</li> <li>• K2 Current Computer-based/ electronic production techniques using a range of software and hardware options</li> <li>• K3 Familiarisation of types and applications of sound processing and MIDI software</li> <li>• K4 Musical and compositional evaluation and implementation</li> <li>• K5 Marketing and promotional techniques</li> <li>• K6 Understand and know the terminology of sub-system hardware and components</li> <li>• K7 Appreciate the operating principles of various sound engineering systems</li> </ul>	<b>Cognitive Skills in the Context of the Subjects</b> <ul style="list-style-type: none"> <li>• C1 Assist in the evaluation of a given set of creative requirements within a set of applications</li> <li>• C2 Interpret a specification</li> <li>• C3 execute an implementation plan for a sound engineering project</li> <li>• C4 Analyse appropriate approaches for a creative activity</li> <li>• C5 Analyse and evaluate the characteristics of the range of equipment and setups</li> <li>• C6 Identify and solve technical problems associated with the implementation of studio design and sound production</li> <li>• C7 Relate the knowledge and skills obtained during the placement to new subject areas and disciplines</li> </ul> <b>Subject-specific practical /professional skills</b> <ul style="list-style-type: none"> <li>• S1 Demonstrate knowledge and understanding of the physical and engineering basis of synthesis and sampling methods</li> <li>• S2 Demonstrate practical abilities with synthesizers, MIDI protocols and sampling techniques</li> <li>• S3 Demonstrate procedures and techniques for post production</li> <li>• S4 demonstrate competence in the utilisation of sound processing software appropriate to a range of multimedia applications</li> <li>• S5 appreciate the needs and aspirations of management, colleagues, the work force, members of the public, customers and representatives of other companies</li> <li>• S6 Utilise techniques and technologies acquired on the programme in an industrial or commercial environment</li> <li>• S7 Acquire knowledge and skills relevant to the subject area of the programme recognising the relevance of knowledge and skills acquired during the programme</li> </ul>	<b>Other skills (e.g. key/transferable) developed in subject or other contexts</b> <ul style="list-style-type: none"> <li>• O1 Competent in the use of information technology and computing facilities</li> <li>• O2 Communicate effectively both orally and in writing</li> <li>• O3 Ability to work independently and manage time and resources effectively</li> <li>• O4 Life long learning skills/PDP</li> <li>• O5 Carry out effective and targeted work placement</li> </ul>
---	--	--