10. PROGRAMME AIMS AND INTENDED LEARNING OUTCOMES

The aims and intended learning outcomes of the B.Sc. and HND in Creative Technologies are detailed in the following Programme Specification Documents.

10.1 B.Sc. Programme Specification

1. Qualification Bsc. (Hons)	2. Programme Title CreativeTechnologies	3. UCAS Code TBD	4. Programme Type Modular B.Sc. Single. Full Time and Part Time

5. Main Purposes and Distinctive Features of the Programme

Main Purposes

i. To provide students with a broad based education in the specification, design, development and application of creative technologies.

ii. To equip students with the skills and knowledge necessary to pursue a successful career in the digital media industries.

iii. To develop in students an ability to analyse, specify, design, produce and market digital media material.

iv. To promote in students a capability to contribute in a creative and innovative manner to rapid technological change.

Distinctive Features

i. Choice from a comprehensive range of creative technologies application areas.

ii. Extensive practical activities using state of the art laboratory equipment.

iii. Personalised learning programmes.

iv. Opportunities for industrial projects and placements.

v. Extensive use of e-learning material provided within a Virtual Learning Environment.

6. What a graduate should know and be able to do on completion of the programme

Graduates will have demonstrated knowledge and skills in the following :-

Knowledge and understanding in the context of the subject(s)

i. Digital technologies, structures and principles of operation.
ii. Design systems, methodologies and production techniques
iii. Types and applications of digital design software
iv. Artistic evaluation and implementation.
v. Project planning and management
vi. Marketing and promotional techniques

Cognitive skills in the context of the subject(s)

i. Critically evaluate a given set of technical and artistic requirements for a creative technologies application.
ii. Construct an appropriate specification from a given set of requirements
iii. Derive a suitable implementation plan for a creative technologies project.
iv. Analyse appropriate artistic approaches for a creative design activity.
v. Design, integrate and test digital media material.
vi. Devise and implement appropriate human computer interaction techniques to maximise effectiveness.
vii. Identify and solve technical problems associated with the design and delivery of digital media material.

Subject-specific practical/professional skills

i. Use a range of computer systems and networks.
ii. Specify and configure appropriate computer hardware & software for a creative technologies application.
iii. Select, evaluate and utilise appropriate techniques and technologies to construct digital media material.
iv. Define and utilise design software for graphics, animation, video, audio, virtual reality, special effects and interactive applications.
v. Apply suitable and appropriate artistic considerations and implementations to a design activity.
vi. Prepare appropriate documentation and deliver relevant presentations

Other skills (e.g. key/transferable) developed in subject or other contexts

i. Use a range of computing and IT facilities
ii. Pursue independent study
iii. Communicate effectively orally and in writing.
iv. Manage time and resources effectively
v. Engage in continual professional development

7. Qualities, Skills & Capabilities Profile

The educational and training goals of the programme are to develop and demonstrate the following qualities, skills, capabilities and values in its graduates.

A Cognitive	B Practical	C Personal & Social	D Other
Evaluation of systems and ideas;	Computing hardware, software and network specification and configuration;	Self motivation;	Project proposals, feasibility studies and technical report writing;
Design and synthesis;	Digital media material specification, design and implementation;	Organisation and time management;	Presentation;
Applied problem solving;	Artistic evaluation and implementation;		Investigation;
Analysis of Information;			Information gathering;
Flexibility of thought;			

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

3 years full time; 4 - 5 years part time organised on a 2 semesters per year basis and comprising 360 credits of study

Part 1 comprises 6 level 1 20 credit modules or equivalent

Part 2 comprises 6 level H2 20 credit modules or equivalent AND 6 level H3 20 credit modules or equivalent

Part II

Bachelor Honours Degree - 360 credits

	Optional Modules	Core Modules	Project
Level 3	Choice of level 3 modules from:- Multimedia & Website Development Games Design Special Effects Development Sound Engineering & Design		40 credit individual project (for single subject) with self managed integration, extension & practical application of knowledge

Diploma of Higher Education - 240 credits

Level 2	Choice of level 2 modules from:- Multimedia & Website Development Games Design Special Effects Development Sound Engineering & Design	Career Development Project Skills	

Part I (Level 1)   *Certificate of Higher Education – 120 credits*

Level 1	Choice of level 1 modules from:- Multimedia & Website Development Games Design Special Effects Development Sound Engineering & Design	Core Skills	

9. Learning, Teaching and Assessment

Learning, Teaching and Assessment Strategy

Learning and Teaching Methods

Active learning is promoted by lectures, seminars, demonstrations, videos and guided student centred activities. In particular, extensive use will be made of online study techniques. Practical skills will be acquired through laboratory sessions, demonstrations, assignments and projects.

10. Other Information

Date programme first offered

September 2005

Admissions Criteria
Standard Requirements
Two GCSE A2 level passes with 160 points.
or
Advanced Vocational Certificate of Education (AVCE) double award with 160 points
or
Edexcel/BTEC National 12 unit Certificate or 18 unit Diploma qualification in a relevant area with an average of merits. The BTEC six unit Award is only

Assessment Methods

Assessment tasks are linked to the learning outcomes of each module and are normally completed by the end of each module. Types of assessment include :-
Written examinations (unseen or open-book), essays, assignments, projects, case study analyses, in-class tests (practical, written or online), demonstrations and interviews.

Assessment Classification System

The pass mark for individual modules is 40%. Final degree classification is based on aggregated performance in Part 2 modules according to the Technology Modular Scheme

Honours Classification Bands

First Class	70% and above
Upper Second Class	60%-69%
Lower Second Class	50%-59%
Third Class	40%-49%
Borderline/	30%-39%
Consideration for	
Unclassified degree	

acceptable for degree entry if it is combined with GCE AS/A level or AVCE qualifications

Non Standard Entry

Other equivalent qualifications, such as Scottish Higher passes, the Irish Leaving Certificate International Baccalaureate.

or

Pass in a Kitemarked Access to Higher Education course.

or

Applicants under 21 will normally also require five GCSE passes at grade C or above including Mathematics and English or equivalent. Mature applicants over 21 years, without the above qualifications, but with relevant life/work experience will be considered for admission following an interview with a member of the course team.

Indicators of Quality and Standards

i. Validated by panel with external subject specialists
ii. External examiner validates Part 2 assignments and examinations
iii. Consistent with relevant QAA Benchmark statement for computing degrees

10.2 B.Sc Programme Modules

Level 1

Module Number	Module Title	Credits	Programme
CST1009 MWD1000 MWD1001 MWD1002 MWD1003	Computer Systems Architecture Digital Media Website Production Programming for the Web Creative Design	20 20 20 20 20	Multimedia and Website Development
PDD1007 PDD1006 SFX1001 CST1200 PAV1216	Introduction to Visualisation Visual Studies 1 Visualisation 2 Programming and Design 1 Media Production	20 20 20 20 20	Special Effects Development
GAD1000 GAD1002 GAD1003 GAD1001 PDD1013	Games Scripting 1 Games History and Context Games Reviewing Games Design and Level Design Introduction to Visualisation Technology	20 20 10 20 10	Games Design
FSD1000 FSD1003 FSD1004 FSD1005 FSD1002 FSD1006	Sound in Context Science of Sound Studio Techniques Introduction to Synthesis & MIDI Electronic Music-Theory & Practice Digital Sound Production	10 10 20 20 20 20	Sound Engineering and Design
ECE1000	**Core Skills**	**20**	Common to all programmes

Mandatory modules in bold

Level 2

Module Number	Module Title	Credits	Programme
LCT2504	Computer Security	20	
LCT2512	Unix	20	
CST2503	Database Theory and Practice	20	
CST2505	Human Computer Interaction	20	Multimedia and Website
LCT2505	Computer Sound Processing	20	Development
MWD2000	Digital Imaging and Video	20	
MWD2001	Multimedia and Website Design	20	
MWD2002	Work Placement	20	
SFX2000	Special Effects Modelmaking 1	20	
SFX2001	Video Effects Production	20	Special Effects Development
SFX2008	Special Effects Specialisation	20	
GAD2000	Games Scripting 2	20	
GAD2002	Games Narrative and Design	20	
GAD2001	Level Design 2	20	Games Design
PDD2007	Computer modelling and Art	20	
FSD2000	Contemporary Studies	10	
FSD2006	Electronic Composition	20	
LCT2505	Computer Sound Processing	20	Sound Engineering and
FSD2003	Post Production Techniques	20	Design
FSD2005	Studio Design	10	
LCT2515	**Career Development**	**10**	Common to all programmes
LCT2514	**Project Skills**	**10**	

Mandatory modules in bold

Level 3

Module Number	Module Title	Credits	Programme
LCT3012 LCT3009 MWD3005 MWD3001 MWD3002 MWD3003 MWD3004	Enterprise Systems Electronic Commerce Virtual Environment Technology Internet Based Computer Games Multiplatform Applications Business Issues of Digital Media Multimedia Project Development	20 20 20 20 20 20 20	Multimedia and Website Development
PDD3003 SFX3001 SFX3003	Advanced Visualisation Techniques Special Effects Modelmaking 2 'Bigature' Model Making	20 20 20	Special Effects Development
GAD3000 GAD3002 LCT3003 PDD3003	Games Scripting 3 Games Design Theory Business of Computer Games Advanced Visualisation Techniques	20 20 20 20	Games Design
LCT3001	**Project**	**40**	Common to all programmes

Mandatory modules in bold

10.3 Mapping of B.Sc. Learning Outcomes to Modules

Learning Outcomes

Knowledge and understanding in the context of the subject(s)

K1	Digital technologies, structures and principles of operation.
K2	Design systems, methodologies and production techniques
K3	Types and applications of digital design software
K4	Artistic evaluation and implementation.
K5	Project planning and management
K6	Marketing and promotional techniques

Subject-specific practical/professional skills

S1	Use a range of computer systems and networks.
S2	Specify and configure appropriate computer hardware & software for a creative technologies application.
S3	Select, evaluate and utilise appropriate techniques and technologies to construct digital media material.
S4	Define and utilise design software for graphics, animation, video, audio, virtual reality, special effects and interactive applications.
S5	Apply suitable and appropriate artistic considerations and implementations to a design activity.
S6	Prepare appropriate documentation and deliver relevant presentations

Cognitive skills in the context of the subject(s)

C1	Critically evaluate a given set of technical and artistic requirements for a creative technologies application.
C2	Construct an appropriate specification from a given set of requirements
C3	Derive a suitable implementation plan for a creative technologies project.
C4	Analyse appropriate artistic approaches for a creative design activity.
C5	Design, integrate and test digital media material.
C6	Devise and implement appropriate human computer interaction techniques to maximise effectiveness.
C7	Identify and solve technical problems associated with the design and delivery of digital media material.

Other skills (e.g. key/transferable) developed in subject or other contexts

O1	Use a range of computing and IT facilities
O2	Pursue independent study
O3	Communicate effectively orally and in writing.
O4	Manage time and resources effectively
O5	Engage in continual professional development

Due to the wide range of optionality in this programme it will not be possible to map every combination of module. The following however details an example for a student electing to follow a digital media design theme.

LEARNIG OUTCOME	ECE1000	CST1009	MWD1004	MWD1003	MWD1000	MWD1001	MWD1002	LCT2504	LCT2512	CST2503	CST2505	LCT2505	MWD2000	MWD2001	MWD2002	LCT2515	LCT1514	LCT3012	LCT3009	MWD3004	MWD3005	MWD3001	MWD3002	MWD3003	LCT3001
K1		X						X	X	X	X							X	X				X		
K2			X	X				X	X									X	X	X		X	X		
K3					X	X						X		X	X				X	X	X	X		X	X
K4					X	X	X			X	X		X	X	X			X	X	X	X	X	X		X
K5	X					X						X	X	X	X						X			X	X
K6						X					X	X	X	X	X					X	X	X	X	X	X
S1	X		X		X			X	X					X				X					X	X	
S2		X	X					X	X						X			X	X				X	X	X
S3			X		X	X	X			X	X	X	X	X	X			X	X	X	X	X			X
S4				X		X	X			X		X	X	X	X					X	X	X	X		X
S5	X				X	X		X	X			X	X	X				X	X	X			X	X	X
S6	X				X	X						X		X	X	X	X			X			X	X	X
C1					X					X	X			X				X	X	X		X	X	X	X
C2														X						X			X		X
C3						X								X					X	X				X	X
C4						X	X						X	X	X				X	X	X				X
C5			X			X						X	X	X	X				X	X	X	X			X
C6			X	X	X	X	X	X					X	X	X			X	X	X	X	X	X	X	X
C7			X	X	X								X	X	X				X				X		X
O1	X				X	X						X	X	X	X	X	X	X		X			X	X	
O2	X			X	X	X					X	X	X	X	X	X	X		X	X	X	X	X		X
O3	X	X	X	X			X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X
O4	X					X						X	X	X	X	X	X	X		X				X	X
O5	X				X	X						X	X	X	X	X	X	X	X	X	X	X			X