

University of Plymouth

Faculty of Arts, Humanities and Business

School of Art, Design and Architecture

Programme Specification

Award Title(s)

BA (Hons) Game Arts and Design

Definitive Document Approved: December 2018

Amended by Minor Change:
4/1/2019, 24/7/19, 4/12/19 & 28/04/21

1. BA (Hons) Game Arts and Design

Final award title: BA (Hons) Game Arts and Design

UCAS code: W282

HECoS code: 101268 / computer games design

2. **Awarding Institution:** University of Plymouth
Teaching institution(s): University of Plymouth

3. **Accrediting body(ies)**
N/A

4. Distinctive Features of the Programme and the Student Experience

The proposal emerges from strengths in the existing subjects across the School of Art, Design and Architecture, building on the BA/BSc (Hons) Digital Art and Technology (DAT) provision and its 25-year legacy in the UK games industry. The programme will also draw heavily on contributions from Illustration to ensure students visual design skills match their creative thinking and technical expertise.

Emphasis is placed on studio based learning activity and students are encouraged to contribute to the development of a stimulating communal educational environment complimented by well-resourced workshops. Drawing is a fundamental activity within the course, which combined with conceptual and contextual enquiry, design processes, traditional technologies and practices, supports, compliments and enhances explorations within newer digital developments and emerging markets and technologies.

The games industry is constantly evolving, with new technologies and markets emerging each year, as other established markets diminish. Blockbuster games grow ever more advanced and elaborate, while elsewhere new opportunities emerge for small teams and independent game developers. The new programme will prepare students for this dynamic environment with universal core skills and conceptual knowledge that will remain relevant for decades to come, as well as practical skills in the latest tools and technologies, so they are ready to enter the industry as soon as they graduate.

Students will be immersed in the world of the modern, progressive video game culture, from game-jams and iterative design, to experimental game design, serious games and cultural game critique. They will learn to create entire games by themselves, as well as learning to

collaborate as multidisciplinary teams, using agile methodologies to co-ordinate and manage development. Students will learn the value of playtesting their games, iterating multiple versions of the same work based on player feedback.

The optional placement year in this four-year programme remains an exceptional opportunity for students to work in an industrial context in which a host of technical and creative skills are acquired, as well as the professional and personal developments that are made through working on 'real' projects in 'real' teams. This is a unique opportunity offered by very few degree programmes and provides graduates with an immense boost to their experience and CV.

The Programme team has had significant history of success with supporting the formation of graduate companies and graduate employment within the broad field of Digital Art & Technology, and digital games specifically. Graduates have gone on to find success at well-known games studios such as Electronic Arts, Aardman Digital and Bossa Studios, and founded their own studios, such as Cowly Owl, Mutant Labs and Strike Gamelabs.

The Programme's teaching and learning activities are informed by a strong integration with a world-class community of research-active staff and visiting industry professionals.

5. Relevant QAA Subject Benchmark Group(s)

In order to achieve a complete and coherent approach across the broad range of themes and to embrace the inter/trans-disciplinary nature of Digital Art and Technology, the Computing QAA Benchmarks have been extended to include relevant Benchmarks from Art and Design and Communication, Media, Film and Cultural Studies. The programme has also been developed with reference to the SEEC Credit Level Descriptors for Higher Education.

6. Programme Structure

The BA Game Arts and Design will share 7 modules with the current BA/BSc Digital Media Design course, designed to fit specifically this programme.

As such, the proposed programme creates a unique hybrid of two of the school's current strengths, namely visual and artistic (including character and level design) and digital creative (interactive technologies and game design with strong links with the indie game industry and game as art movements).

The programme consists of 3 years of study (with an optional placement year between the second and final year).

The first year will involve introducing students to a number of "building blocks" – essential skills, concepts, techniques and technologies drawn from key disciplines from across the faculty. These will include character, scene and level design, creative game coding, sound design and emerging interaction technologies.

In the second year, these discrete skills will begin to coalesce into more substantial areas of game art and design, including the construction of narratives, immersive game experiences, user experience and interaction design and business and entrepreneurial models.

As mentioned the programme will include an optional one-year industrial placement between Stage 2 and final stage. Students will be strongly encouraged to gain a placement and the DAT/DMD subject area will exploit its existing network of contacts and industrial links to support students in finding a suitable situation. There will also be the opportunity for students to undertake a one year international exchange, again between 2nd and final stages.

The final year will conclude the degree by bringing all of these threads together into a coherent whole and targeting key areas such as interactivity, visualisation and immersion, gamification, cinematic and animation, production lifecycles, ludic and theories of play.

Key to ensuring the overall cohesiveness of the degree scheme are a number new specialised modules introduced within the programme. These modules will draw upon the learning outcomes from other modules in order to provide students with a complete picture of the subject area. This will aid students in identifying linkages and translating concepts between the topics covered in the various modules. The Final Major Project also provides an opportunity to combine and synthesise all of the various aspects of the degree into a single, coherent project. To aid in this endeavour, students will be closely supervised in their work, with input from the various disciplines involved.

Years 1 and 2 will consist of 9 core modules (5 modules in Year 1, and 4 modules in Year 2). The final year consists of 3 core modules (a Final Year Project, a school-wide Common Dissertation, and a Game specific taught module) and a selection of optional modules, allocated to the students appropriately to support their chosen final year project topic.

		Week	01 (09)	02 (10)	03 (11)	04 (12)	05 (13)	06 (14)	07 (15)	08 (16)	09 (17)	10 (18)	11 (19)	12 (20)	13 (24)	Break	01 (27)	02 (28)	03 (29)	04 (30)	05 (31)	06 (32)	07 (33)	08 (34)	09 (35)	10 (36)	11 (40)	12 (41)	13 (42)														
GAD	Y1	DAT441 Disruptive Design Strategies (20c)														GAD442 Introduction to Immersion (20c)														GAD444 Interactive Narrative (20c)													
		GAD443 Game Programming (20c)														GAD445 Character and Environment Design (40c)																											
	Y2	GAD551 Level Design (40c)														GAD553 Game Development (40c)																											
		DAT552 Virtuality & Immersion (20c)														DAT554 Common Challenge: Creative Industries (20c)																											
		Optional Placement Year																																									
	Y3	ADA600 Critical Practices: Dissertation (20c)														[Core]														GAD669 Final Year Project (60c)													
		GAD663 Gameplay (20c)														[Core]																											
		DAT661 Realtime (20c)														[Optional]																											
		DAT662 Everyware (20c)														[Optional]																											
		DAT664 Venture Cultures (20c)														[Optional]																											

Stage 1

DAT441 - Introductory module considering various creative and disruptive strategies

GAD442 - Issues and techniques in building immersion in game experiences

GAD443 - An introduction to fundamental programming and coding approaches

GAD444 - Introduction to character art and animation with environment design

GAD445 - Development of narratives and narrative structure in games

Stage 2

GAD551 - Level design and user experience development with theories of play

DAT552 - Techniques and approaches in Virtual, Augmented or Mixed Reality

GAD553 – Team based game development and design

DAT554 - Business and entrepreneurial issues within the creative industries

Stage 3

Optional Industrial Placement Year – provides exceptional opportunity for students to work in an industrial context with an immense boost to their experience and CV.

Final Stage

DAT663 (core) - Gameplay core module focusing on marketing, pitching and development

ADA600 (core) – Common dissertation module focusing on critical practices

DAT661 (optional) - Realtime module focusing on visual/acoustic representation across a range of platforms and/or installations

DAT664 (optional) - Venture Culture entrepreneurship and commercialisation in creative industries

DAT662 (optional) – Everyware focuses on development strategies for social integration of technologies such as AI, automation etc.

GAD669 (core) - Final Year Project

(Students select one optional module)

Final degree classification is calculated from the all three years of study, using the following weightings: Stage 1: 10% Stage 2: 30% Final Stage: 60%

There are a number of current and planned progression routes that will lead into the final year of this programme. In particular, we also have a number of partner colleges (City, Cornwall, South Devon amongst others) with progression routes into the DMD programme that would have the option of progressing onto the new Game Arts and Design programme.

As part of the existing BA/BSc Digital Media Design programme there is currently a final year game design pathway onto which students from existing academic partners already progress. As such we have developed a close relationship with these partners and have a well-developed progression mechanism. This includes amongst other things visits to colleges, Plymouth open days and guest lecture exchanges. This approach will be expanded to include the newly proposed programme and the techniques used extended to new academic partners.

Although no formal progression mechanisms out from the proposed programme are in place, graduates will be ideally situated to undertake a Masters in Game Design, Digital Art and Technology or PhD programme within the subject area.

7. Programme Aims

The aims of this programme are:

A) Career Skillset: To provide students with a knowledge base and skillset suitable for a career in the Game related industries.

B) Research and Industry: To ensure the relevancy of course content through the integration of the research expertise of staff and through links with industry.

C) User-centred design: To sensitise students to the importance of understanding the needs of users and the implications these have for the design of user-centred systems.

D) Culture and Society: To produce graduates with the ability to understand impact (both positive and negative) of games on culture and society.

E) Critical communication: To produce graduates with skills in critical evaluation, logical argument and effective communication.

8. Programme Intended Learning Outcomes

8.1. Knowledge and understanding

On successful completion graduates should have developed:

1. knowledge and understanding of essential facts, concepts, principles and theories relating to computing and computer applications as appropriate to the programme of study.
2. knowledge of the cultural, social, historical, political and contemporary contexts which surround game design and to promote considered, innovative, original and experimental solutions to game design problems.
3. awareness of the economic forces which frame the games industry, and the role of games in culture and society.
4. an understanding of key production processes and professional practices relevant to the games industry and games as an artistic medium.
5. an understanding of how game mechanics and narrative structures are capable of conveying a range of opinion, viewpoints and experience.

8.2. Cognitive and intellectual skills

On successful completion graduates should have developed:

1. ability to evaluate and analyse the extent to which a computer-based system meets the criteria defined for its current use and future development.
2. ability to deploy appropriate theory, practices and tools for the specification, design, implementation and evaluation of computer-based systems.
3. ability to engage critically with major thinkers, debates and intellectual paradigms within the field and put them to productive use.
4. ability to evaluate systems in terms of general quality attributes and possible trade-offs presented within the given problem.
5. ability to demonstrate an awareness and appreciation of game design as a subject

8.3. Key and transferable skills

On successful completion graduates should have developed the ability to:

1. present succinctly to a range of audiences (orally, electronically or in writing) rational and reasoned arguments that address a given information handling problem or opportunity. This should include assessment of the impact of new technologies.

2. deploy effectively the tools used for the construction and documentation of digital games, with particular emphasis on understanding the whole process involved in the effective deployment of computers to create interactive games, environments and narratives.
3. initiate, develop and realise distinctive and creative work within various forms of writing or of aural, visual, audio-visual, sound or other electronic media;
4. experiment, as appropriate, with forms, conventions, languages, techniques and practices.

8.4. Employment related skills

On successful completion graduates should have developed:

1. recognition of the professional, moral and ethical issues involved in the exploitation of computer game technology, and be guided by the adoption of appropriate professional, ethical and legal practices.
2. ability to work as a member of a game development team, recognising the different roles within a team and different ways of organising teams.
3. Understand the makeup and workings of the games industry.

8.5. Practical skills

On successful completion graduates should have developed:

1. Ability to conceive and plan a digital game and communicate the design via writing, diagrams and illustrations in a Game Design Document.
2. Ability to individually produce and iterate upon a working game prototype.
3. Ability to collaborate with other team members to produce a professional-quality “vertical slice” game demo or full game.
4. Understanding of health and safety considerations of working with games technology.

9. Admissions Criteria, including APCL, APEL and DAS arrangements

All applicants must have GCSE (or equivalent) Maths and English at Grade C or above.

Entry Requirements for BA Game Arts and Design	
A-level/AS-level	112 UCAS points consisting of at least two 6-unit A levels or one 12-unit vocational A level. The remaining points can be made up as you wish. All subjects except General Studies considered. Key skills are not included in the points calculation. At least one technical subject preferred.
BTEC National Diploma/QCF Extended Diploma	Normal minimum entry requirements are grade DMM - 112 UCAS Points
Access to Higher Education at level 3	Pass access with 33 Credits at Merit/or Distinction
Welsh Baccalaureate	112 UCAS points at A Level
Scottish Qualifications Authority	112 Tariff points
Irish Leaving Certificate	112 Tariff points at Higher Level, plus Ordinary Level Grade C Maths and English
International Baccalaureate	25 overall If overseas and not studying English within IB, must have IELTS 6.0 overall with 5.5 in all other elements.
Progression from Extended Science	Students who pass the Extended Science year are guaranteed progression to one of the Faculty's BSc (Hons) programmes and detailed advice will be provided by the Admissions Tutor.

10. Progression criteria for Final and Intermediate Awards

- Certificate of Higher Education, 120 credits at Level 4 or above
- Diploma of Higher Education, 240 credits, of which at least 120 are at Level 5 or above
- Ordinary Degree, 320 credits of which 80 are at Level 6 and a further 120 at Level 5 or above

11. Exceptions to Regulations

12. Transitional Arrangements

New programme – no transitional arrangements required

13. Mapping and Appendices:

13.1. ILO's against Modules Mapping

LEVEL 4				
FHEQ Descriptors	Subject Benchmark(s)	Programme Aims	Programme Outcomes	Core Modules linked to outcomes
Students will have demonstrated:				
Knowledge of the underlying concepts and principles associated with their areas of study;	C1: Knowledge and understanding, P10: Employ experience,	Career Skillset,	Knowledge and understanding,	DAT441, GAD442, GAD443, GAD444, GAD445
Ability to evaluate and interpret these within the context of that area of study;	C6: Reflection and communication, P2: Evaluate systems,	Career Skillset,	Cognitive and intellectual skills,	DAT441, GAD442, GAD444
Ability to present, evaluate and interpret qualitative and quantitative data;	C3: Requirements, C4: Critical evaluation and testing, C6: Reflection and communication, P2: Evaluate systems,	Career Skillset, User-centred design,	Cognitive and intellectual skills,	GAD442, GAD443, GAD444, GAD445
Students will be able to:				
Evaluate the appropriateness of different approaches to solving problems related to their area of study;	C6: Reflection and communication, P2: Evaluate systems,	Career Skillset,	Cognitive and intellectual skills,	DAT441, GAD443, GAD445
Communicate the results of their study accurately and reliably and with structured and coherent argument	C6: Reflection and communication,	Critical communication,	Key and transferable skills,	GAD442, GAD444, GAD445

Undertake further training and develop new skills within a structured and managed environment	C5: Methods and tools, P1: Specify, design and construct systems, P4: Deploy tools for construction,	Career Skillset, Research and Industry,	Key and transferable skills, Employment related skills, Practical skills,	GAD444, GAD445
Students will also have:				
The qualities and transferable skills necessary for employment requiring the exercise of some personal responsibility	C5: Methods and tools, P1: Specify, design and construct systems, P4: Deploy tools for construction,	Career Skillset, Research and Industry,	Key and transferable skills, Employment related skills, Practical skills,	GAD443, GAD444, GAD445
LEVEL 5				
FHEQ Descriptors	Subject Benchmark(s)	Programme Aims	Programme Outcomes	Core Modules linked to outcomes
Students will have demonstrated:				
Knowledge and critical understanding of the well-established principles of their area of study and the way in which those principles have developed;	C1: Knowledge and understanding, C9: Critical discourse, P3: Recognise any risks, P10: Employ experience,	Career Skillset, Culture and Society, Critical communication,	Knowledge and understanding,	GAD551, GAD553, DAT552
Ability to apply underlying concepts and principles outside the context in which they were first studied, including where appropriate, the application of those principles in an employment context;	C1: Knowledge and understanding,	Career Skillset, Research and Industry,	Knowledge and understanding, Employment related skills,	GAD551, GAD553, DAT552, DAT554

Knowledge of the main methods of enquiry in the subject relevant to the named award, and ability to evaluate critically the appropriateness of different approaches to solving problems in the field of study;	C1: Knowledge and understanding, C4: Critical evaluation and testing, C6: Reflection and communication, C9: Critical discourse, P2: Evaluate systems, P3: Recognise any risks, P10: Employ experience,	Career Skillset, Culture and Society, Critical communication,	Knowledge and understanding, Cognitive and intellectual skills,	GAD553, DAT554
An understanding of the limits of the knowledge, and how this influences analyses and interpretations based on that knowledge	C1: Knowledge and understanding, C6: Reflection and communication, P10: Employ experience,	Critical communication,	Knowledge and understanding, Cognitive and intellectual skills,	GAD551, DAT552, DAT554
Students will be able to:				
Use a range of established techniques to initiate and undertake critical analysis of information, and to propose solutions to problems arising from that analysis;	C2: Modelling, C3: Requirements, C4: Critical evaluation and testing, C5: Methods and tools, C9: Critical discourse, C10: Contextual awareness, P2: Evaluate systems, P3: Recognise any risks, P4: Deploy tools for construction,	User-centred design, Culture and Society, Critical communication,	Cognitive and intellectual skills,	DAT552, GAD553, DAT554
Effectively communicate information, arguments and analysis in a variety of forms to specialist and non-specialist	C3: Requirements, C4: Critical evaluation and testing, C5: Methods and tools, C6: Reflection and communication, C10: Contextual	User-centred design, Critical communication,	Cognitive and intellectual skills, Key and transferable skills,	GAD551, DAT552, DAT554

audiences, and deploy key techniques of the discipline effectively;	awareness, P2: Evaluate systems, P4: Deploy tools for construction,			
Undertake further training, develop existing skills and acquire new competences that will enable them to assume significant responsibility within organisations.	C5: Methods and tools, P1: Specify, design and construct systems, P4: Deploy tools for construction, P10: Employ experience,	Career Skillset, Research and Industry,	Key and transferable skills, Employment related skills, Practical skills,	GAD551, GAD553
Students will also have:				
The qualities and transferable skills necessary for employment requiring the exercise of personal responsibility and decision-making	C2: Modelling, C5: Methods and tools, P1: Specify, design and construct systems, P4: Deploy tools for construction,	Career Skillset, Research and Industry,	Key and transferable skills, Employment related skills, Practical skills,	GAD551, DAT552, GAD553, DAT554
LEVEL 6				
FHEQ Descriptors	Subject Benchmark(s)	Programme Aims	Programme Outcomes	Core Modules linked to outcomes
Students will have demonstrated:				
A systematic understanding of key aspects of their field of study, including acquisition of coherent and detailed knowledge, at least some of	C1: Knowledge and understanding, P10: Employ experience,	Career Skillset,	Knowledge and understanding,	DAT661, DAT662, DAT663, DAT664, GAD669

which is at, or informed by, the forefront of defined aspects of a discipline;				
An ability to deploy accurately established techniques of analysis and enquiry within a discipline;	C3: Requirements, C4: Critical evaluation and testing, C5: Methods and tools, C10: Contextual awareness, P2: Evaluate systems, P4: Deploy tools for construction,	User-centred design, Culture and Society,	Cognitive and intellectual skills,	DAT661, DAT662, DAT663, GAD669
Conceptual understanding to enable them to (a) devise and sustain arguments and/or solve problems, using ideas and techniques, some of which are at the forefront of a discipline; (b) describe and comment upon particular aspects of current research or equivalent advanced scholarship in the discipline;	C1: Knowledge and understanding, C5: Methods and tools, C9: Critical discourse, C10: Contextual awareness, P4: Deploy tools for construction,	Research and Industry, User-centred design,	Cognitive and intellectual skills,	DAT661, DAT662, GAD669
An appreciation of the uncertainty, ambiguity and limits of knowledge;	C1: Knowledge and understanding, P10: Employ experience,	Critical communication,	Knowledge and understanding,	DAT661, DAT662, DAT663, GAD669
The ability to manage their own learning and to make use of	C9: Critical discourse,	Culture and Society,	Cognitive and intellectual skills,	DAT662, DAT664, GAD669

scholarly reviews and primary sources;				
Students will be able to:				
Apply the methods and techniques that they have learned to review, consolidate, extend and apply their knowledge and understanding, and to initiate and carry out projects;	C1: Knowledge and understanding, C5: Methods and tools, C10: Contextual awareness, P4: Deploy tools for construction, P10: Employ experience,	User-centred design,	Knowledge and understanding,	DAT661, DAT662, DAT663, GAD669
Critically evaluate arguments, assumptions, abstract concepts and data, to make judgements, and to frame appropriate questions to achieve a solution or a range of solutions to a problem;	C1: Knowledge and understanding, C2: Modelling, C6: Reflection and communication, C9: Critical discourse, P2: Evaluate systems, P3: Recognise any risks,	Career Skillset, Culture and Society, Critical communication,	Knowledge and understanding, Cognitive and intellectual skills,	DAT661, DAT662, GAD669
Communicate information, ideas, problems and solutions to both specialist and non-specialist audiences.	C2: Modelling, C6: Reflection and communication,	Critical communication,	Key and transferable skills,	DAT663, DAT664, GAD669
Students will also have:				

The qualities and transferable skills necessary for employment requiring (a) the exercise of initiative and personal responsibility (b) decision-making in complex and unpredictable contexts (c) the learning ability needed to undertake appropriate further training of a professional or equivalent nature.	C2: Modelling, C5: Methods and tools, P1: Specify, design and construct systems, P4: Deploy tools for construction,	Career Skillset, Research and Industry,	Key and transferable skills, Employment related skills, Practical skills,	DAT663, DAT664, GAD669
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13.2. Assessment against Modules Mapping

Module	Assessment Type
DAT441	100% Coursework
GAD442	100% Coursework
GAD443	100% Coursework
GAD444	100% Coursework
GAD445	100% Coursework
GAD551	100% Coursework
DAT552	100% Coursework
GAD553	100% Coursework
DAT554	100% Coursework
ADA600	100% Coursework
DAT661	100% Coursework
DAT662	100% Coursework
DAT663	100% Coursework
DAT664	100% Coursework
GAD669	100% Coursework

13.3. Skills against Modules Mapping

Level 4		Benchmark
DAT441	Disruptive Design Strategies	C1: Knowledge and understanding C2: Modelling C3: Requirements

		<p>C4: Critical evaluation and testing C5: Methods and tools C6: Reflection and communication C7: Professional considerations C8: Cultural awareness C9: Critical discourse C10: Contextual awareness</p> <p>P1: Specify, design and construct systems P2: Evaluate systems P3: Recognise any risks P4: Deploy tools for construction P5: Member of team P6: Operate equipment P7: Media production technologies P8: Distinctive and creative work P9: Experimentation P10: Employ experience</p> <p>T1: Information-retrieval skills T2: Numeracy T3: Use IT facilities T4: Managing time T5: Need for CPD T6: Generate ideas T7: Conceptual frameworks</p>
GAD442	Introduction to Immersion	<p>C1: Knowledge and understanding C2: Modelling C3: Requirements C4: Critical evaluation and testing C5: Methods and tools C6: Reflection and communication C7: Professional considerations C8: Cultural awareness C9: Critical discourse C10: Contextual awareness</p> <p>P1: Specify, design and construct systems P2: Evaluate systems P3: Recognise any risks P4: Deploy tools for construction P5: Member of team P6: Operate equipment P7: Media production technologies P8: Distinctive and creative work P9: Experimentation P10: Employ experience</p> <p>T1: Information-retrieval skills T2: Numeracy</p>

		<p>T3: Use IT facilities T4: Managing time T5: Need for CPD T6: Generate ideas T7: Conceptual frameworks</p>
GAD443	Game Programming	<p>C1: Knowledge and understanding C2: Modelling C3: Requirements C4: Critical evaluation and testing C5: Methods and tools C6: Reflection and communication C7: Professional considerations C8: Cultural awareness C9: Critical discourse C10: Contextual awareness</p> <p>P1: Specify, design and construct systems P2: Evaluate systems P3: Recognise any risks P4: Deploy tools for construction P5: Member of team P6: Operate equipment P7: Media production technologies P8: Distinctive and creative work P9: Experimentation P10: Employ experience</p> <p>T1: Information-retrieval skills T2: Numeracy T3: Use IT facilities T4: Managing time T5: Need for CPD T6: Generate ideas T7: Conceptual frameworks</p>
GAD444	Interactive Narrative	<p>C1: Knowledge and understanding C2: Modelling C3: Requirements C4: Critical evaluation and testing C5: Methods and tools C6: Reflection and communication C7: Professional considerations C8: Cultural awareness C9: Critical discourse C10: Contextual awareness</p> <p>P1: Specify, design and construct systems P2: Evaluate systems P3: Recognise any risks P4: Deploy tools for construction</p>

		<p>P5: Member of team P6: Operate equipment P7: Media production technologies P8: Distinctive and creative work P9: Experimentation P10: Employ experience</p> <p>T1: Information-retrieval skills T2: Numeracy T3: Use IT facilities T4: Managing time T5: Need for CPD T6: Generate ideas T7: Conceptual frameworks</p>
GAD445	Character and Environment Design	<p>C1: Knowledge and understanding C2: Modelling C3: Requirements C4: Critical evaluation and testing C5: Methods and tools C6: Reflection and communication C7: Professional considerations C8: Cultural awareness C9: Critical discourse C10: Contextual awareness</p> <p>P1: Specify, design and construct systems P2: Evaluate systems P3: Recognise any risks P4: Deploy tools for construction P5: Member of team P6: Operate equipment P7: Media production technologies P8: Distinctive and creative work P9: Experimentation P10: Employ experience</p> <p>T1: Information-retrieval skills T2: Numeracy T3: Use IT facilities T4: Managing time T5: Need for CPD T6: Generate ideas T7: Conceptual frameworks</p>
Level 5		
DAT552	Virtuality and Immersion	<p>C1: Knowledge and understanding C2: Modelling C3: Requirements C4: Critical evaluation and testing</p>

		<p>C5: Methods and tools C6: Reflection and communication C7: Professional considerations C8: Cultural awareness C9: Critical discourse C10: Contextual awareness</p> <p>P1: Specify, design and construct systems P2: Evaluate systems P3: Recognise any risks P4: Deploy tools for construction P5: Member of team P6: Operate equipment P7: Media production technologies P8: Distinctive and creative work P9: Experimentation P10: Employ experience</p> <p>T1: Information-retrieval skills T2: Numeracy T3: Use IT facilities T4: Managing time T5: Need for CPD T6: Generate ideas T7: Conceptual frameworks</p>
DAT554	Creative Industries	<p>C1: Knowledge and understanding C2: Modelling C3: Requirements C4: Critical evaluation and testing C5: Methods and tools C6: Reflection and communication C7: Professional considerations C8: Cultural awareness C9: Critical discourse C10: Contextual awareness</p> <p>P1: Specify, design and construct systems P2: Evaluate systems P3: Recognise any risks P4: Deploy tools for construction P5: Member of team P6: Operate equipment P7: Media production technologies P8: Distinctive and creative work P9: Experimentation P10: Employ experience</p> <p>T1: Information-retrieval skills T2: Numeracy T3: Use IT facilities</p>

		<p>T4: Managing time T5: Need for CPD T6: Generate ideas T7: Conceptual frameworks</p>
GAD553	Game Development	<p>C1: Knowledge and understanding C2: Modelling C3: Requirements C4: Critical evaluation and testing C5: Methods and tools C6: Reflection and communication C7: Professional considerations C8: Cultural awareness C9: Critical discourse C10: Contextual awareness</p> <p>P1: Specify, design and construct systems P2: Evaluate systems P3: Recognise any risks P4: Deploy tools for construction P5: Member of team P6: Operate equipment P7: Media production technologies P8: Distinctive and creative work P9: Experimentation P10: Employ experience</p> <p>T1: Information-retrieval skills T2: Numeracy T3: Use IT facilities T4: Managing time T5: Need for CPD T6: Generate ideas T7: Conceptual frameworks</p>
GAD551	Level Design	<p>C1: Knowledge and understanding C2: Modelling C3: Requirements C4: Critical evaluation and testing C5: Methods and tools C6: Reflection and communication C7: Professional considerations C8: Cultural awareness C9: Critical discourse C10: Contextual awareness</p> <p>P1: Specify, design and construct systems P2: Evaluate systems P3: Recognise any risks P4: Deploy tools for construction P5: Member of team</p>

		<p>P6: Operate equipment P7: Media production technologies P8: Distinctive and creative work P9: Experimentation P10: Employ experience</p> <p>T1: Information-retrieval skills T2: Numeracy T3: Use IT facilities T4: Managing time T5: Need for CPD T6: Generate ideas T7: Conceptual frameworks</p>
Level 6		
ADA600	Common Dissertation: Critical Practices	<p>C1: Knowledge and understanding C2: Modelling C3: Requirements C4: Critical evaluation and testing C5: Methods and tools C6: Reflection and communication C7: Professional considerations C8: Cultural awareness C9: Critical discourse C10: Contextual awareness</p> <p>P1: Specify, design and construct systems P2: Evaluate systems P3: Recognise any risks P4: Deploy tools for construction P5: Member of team P6: Operate equipment P7: Media production technologies P8: Distinctive and creative work P9: Experimentation P10: Employ experience</p> <p>T1: Information-retrieval skills T2: Numeracy T3: Use IT facilities T4: Managing time T5: Need for CPD T6: Generate ideas T7: Conceptual frameworks</p>
DAT661	Realtime	<p>C1: Knowledge and understanding C2: Modelling C3: Requirements C4: Critical evaluation and testing C5: Methods and tools</p>

		<p>C6: Reflection and communication C7: Professional considerations C8: Cultural awareness C9: Critical discourse C10: Contextual awareness</p> <p>P1: Specify, design and construct systems P2: Evaluate systems P3: Recognise any risks P4: Deploy tools for construction P5: Member of team P6: Operate equipment P7: Media production technologies P8: Distinctive and creative work P9: Experimentation P10: Employ experience</p> <p>T1: Information-retrieval skills T2: Numeracy T3: Use IT facilities T4: Managing time T5: Need for CPD T6: Generate ideas T7: Conceptual frameworks</p>
DAT662	Everyware	<p>C1: Knowledge and understanding C2: Modelling C3: Requirements C4: Critical evaluation and testing C5: Methods and tools C6: Reflection and communication C7: Professional considerations C8: Cultural awareness C9: Critical discourse C10: Contextual awareness</p> <p>P1: Specify, design and construct systems P2: Evaluate systems P3: Recognise any risks P4: Deploy tools for construction P5: Member of team P6: Operate equipment P7: Media production technologies P8: Distinctive and creative work P9: Experimentation P10: Employ experience</p> <p>T1: Information-retrieval skills T2: Numeracy T3: Use IT facilities T4: Managing time</p>

		<p>T5: Need for CPD T6: Generate ideas T7: Conceptual frameworks</p>
DAT663	Gameplay	<p>C1: Knowledge and understanding C2: Modelling C3: Requirements C4: Critical evaluation and testing C5: Methods and tools C6: Reflection and communication C7: Professional considerations C8: Cultural awareness C9: Critical discourse C10: Contextual awareness</p> <p>P1: Specify, design and construct systems P2: Evaluate systems P3: Recognise any risks P4: Deploy tools for construction P5: Member of team P6: Operate equipment P7: Media production technologies P8: Distinctive and creative work P9: Experimentation P10: Employ experience</p> <p>T1: Information-retrieval skills T2: Numeracy T3: Use IT facilities T4: Managing time T5: Need for CPD T6: Generate ideas T7: Conceptual frameworks</p>
DAT664	Venture Culture	<p>C1: Knowledge and understanding C2: Modelling C3: Requirements C4: Critical evaluation and testing C5: Methods and tools C6: Reflection and communication C7: Professional considerations C8: Cultural awareness C9: Critical discourse C10: Contextual awareness</p> <p>P1: Specify, design and construct systems P2: Evaluate systems P3: Recognise any risks P4: Deploy tools for construction P5: Member of team P6: Operate equipment</p>

		<p>P7: Media production technologies P8: Distinctive and creative work P9: Experimentation P10: Employ experience</p> <p>T1: Information-retrieval skills T2: Numeracy T3: Use IT facilities T4: Managing time T5: Need for CPD T6: Generate ideas T7: Conceptual frameworks</p>
GAD669	Final Year Project	<p>C1: Knowledge and understanding C2: Modelling C3: Requirements C4: Critical evaluation and testing C5: Methods and tools C6: Reflection and communication C7: Professional considerations C8: Cultural awareness C9: Critical discourse C10: Contextual awareness</p> <p>P1: Specify, design and construct systems P2: Evaluate systems P3: Recognise any risks P4: Deploy tools for construction P5: Member of team P6: Operate equipment P7: Media production technologies P8: Distinctive and creative work P9: Experimentation P10: Employ experience</p> <p>T1: Information-retrieval skills T2: Numeracy T3: Use IT facilities T4: Managing time T5: Need for CPD T6: Generate ideas T7: Conceptual frameworks</p>

Appendix A – Subject Benchmarks

Benchmark statements provide a mechanism for:

- Describing the nature and characteristics of programmes in a specific subject.
- Representing expectations about the standards for the award of qualifications

- The provision of general guidance for articulating the learning outcomes associated with a programme
- The provision for variety and flexibility in the design of programmes and encourage innovation within an agreed overall framework.

The Benchmarks adopted by the Digital Art & Technology Subject Group for DAT modules are drawn from the Computing benchmarks, which originate from the Computing Benchmark developed by the Quality Assurance Agency for Higher Education. However, as the Computing Benchmarks do not engage with many of the pedagogic issues related to DAT modules they have been enhanced with Benchmarks originating in the 'Art and Design', 'Communication, Media, Film Cultural Studies' and 'Materials' Benchmark Statements. For the purposes of this document they have been integrated into appropriate sections of the SoCM numbering scheme.

Students are expected to develop a wide range of abilities and skills. These may be divided into three broad categories:

- Computing-related cognitive abilities and skills, i.e. abilities and skills relating to intellectual tasks:
- Computing-related practical skills:
- Additional transferable skills that may be developed in the context of Computing but which are of a general nature and applicable in many other contexts.

Cognitive, practical and generic skills need to be placed in the context of the programme of study as designed by the institution and/or the possible pathways selected by the individual student. The implicit interplay between these identified skills both within and across these three categories is recognised.

Computing-related cognitive abilities

C1: Knowledge and understanding: demonstrate knowledge and understanding of essential facts, concepts, principles and theories relating to Computing and computer applications as appropriate to the programme of study.

C2: Modelling: use such knowledge and understanding in the modelling and design of computer-based systems for the purposes of comprehension, communication, prediction and the understanding of tradeoffs.

C3: Requirements. practical constraints and computer-based systems (and this includes computer systems, information systems, embedded systems and distributed systems) in their

context: recognise and analyse criteria and specifications appropriate to specific problems, and plan strategies for their solution.

C4: Critical evaluation and testing: analyse the extent to which a computer-based system meets the criteria defined for its current use and future development.

C5: Methods and tools: deploy appropriate theory, practices and tools for the specification, design, implementation and evaluation of computer-based systems.

C6: Reflection and communication: present succinctly to a range of audiences (orally, electronically or in writing) rational and reasoned arguments that address a given information handling problem or opportunity. This should include assessment of the impact of new technologies.

C7: Professional considerations: recognise the professional, moral and ethical issues involved in the exploitation of computer technology and be guided by the adoption of appropriate professional, ethical and legal practices.

C8: Cultural awareness: An awareness of the economic forces which frame the media, cultural and creative industries, and the role of such industries in specific areas of contemporary political and cultural life.

C9: Critical discourse: engage critically with major thinkers, debates and intellectual paradigms within the field and put them to productive use.

C10: Contextual awareness: an understanding of key production processes and professional practices relevant to media, cultural and communicative industries, and of ways of conceptualising creativity and authorship.

Computing-related practical abilities

P1: The ability to specify, design and construct computer-based systems.

P2: The ability to evaluate systems in terms of general quality attributes and possible trade-offs presented within the given problem.

P3: The ability to recognise any risks or safety aspects that may be involved in the operation of computing equipment within a given context.

P4: The ability to deploy effectively the tools used for the construction and documentation of computer applications, with particular emphasis on understanding the whole process involved in the effective deployment of computers to solve practical problems.

P5: The ability to work as a member of a development team, recognising the different roles within a team and different ways of organising teams.

P6: The ability to operate computing equipment effectively, taking into account its logical and physical properties.

P7: The ability to produce work showing competence in operational aspects of media production technologies, systems, techniques and professional practices;

P8: The ability to initiate, develop and realise distinctive and creative work within various forms of writing or of aural, visual, audio-visual, sound or other electronic media;

P9: The ability to experiment, as appropriate, with forms, conventions, languages, techniques and practices;

P10: The ability to employ first hand experience of a range of techniques and materials (artefact analysis, characterisation, processing, testing) to plan, implement and interpret experimental investigations.

The extent to which students acquire these abilities will depend on the emphasis of individual programmes. It is expected, however, that the student will be able to deploy these abilities to a greater and deeper extent than someone who is merely an interested practitioner.

Additional transferable skills

T1: Effective information-retrieval skills (including the use of browsers, search engines and catalogues).

T2: Numeracy in both understanding and presenting cases involving a quantitative dimension.

T3: Effective use of general IT facilities.

T4: Managing one's own learning and development including time management and organisational skills.

T5: Appreciating the need for continuing professional development in recognition of the need for lifelong learning.

T6: Generate ideas, concepts, proposals, solutions or arguments independently and/or collaboratively in response to set briefs and/or as self-initiated activity.

T7: Evaluate and draw upon the range of sources and the conceptual frameworks appropriate to research in the chosen area.

Appendix B – PDP Policy and Placement year

The i-DAT Programme has an embedded PDP scheme that runs throughout Stage 1 and Stage 2 is fundamentally reinforced by the Industrial Placement and continues throughout the Final Stage, specifically within the Venture Culture module. The PDP scheme is intended to provide a platform and foundation for a student's career within and across the broad sectors of the Creative Industries. The PDP describes the 'means by which students can monitor, build and reflect upon their personal development' (Dearing recommendation 20).

The PDP is a structured and supported process undertaken by an individual to reflect upon their own learning, performance and/or achievement and to plan for their personal educational and career development. Although the individual student is ultimately in charge of their own career direction, the Programme provides a structured approach to mapping their engagement with their professional future and provides a range of guidance and advice.

The i-DAT PDP process will enable students to:

- Become more effective, independent and confident self-directed learners.
- Understand how they are learning and relate their learning to a wider context.
- improve their general skills for study and career management.
- Articulate their personal goals and evaluate progress towards their achievement.
- Encourage a positive attitude to learning throughout life.

Stage 1 and 2 students will receive career related guidance via the Placement seminar sessions and workshops that are directed to ensure that students obtain placement jobs which will enable them to realise their true potential.

Students on a professional training year will be able to develop their PDP further through the training reflective journal.

Stage 4 students are expected to be able to self-manage their learning and career planning as such there is no formal procedure in place. However, opportunities for support can be made available on request.

Students are encouraged to think critically about the way in which digital platforms can be used for creative development and as a method of networked publishing within a public sphere. These activities help students to reflect upon and monitor their progress throughout the module and for all subsequent modules. By their final year they will have arrived at an advanced stage in their personal development and have established a substantial online,

networked presence. These activities provide a platform for student to connect to the i-DAT website and the broader community.