Bournemouth University

KEY PROGRAMME INFORMATION

Originating institution(s) Bournemouth University	**Faculty responsible for the programme** Faculty of Media and Communication
Final award(s), title(s) and credits BA (Hons) Computer Animation Technical Arts with Placement (120 Credits, ECTS 60 Level 4 / 120 Credits, ECTS 60 Level 5 / 120 Credits, ECTS 60 Level 6 and successful completion of a placement) BA (Hons) Computer Animation Technical Arts Full Time (120 Credits, ECTS 60 Level 4 / 120 Credits, ECTS 60 Level 5 / 120 Credits, ECTS 60 Level 6)	
Intermediate award(s), title(s) and credits Cert HE Computer Animation Technical Arts (120 Credits, ECTS 60 Level 4) Dip HE Computer Animation Technical Arts (120 Credits, ECTS 60 Level 4 / 120 Credits, ECTS 60 Level 5)	
UCAS Programme Code(s) (where applicable and if known) W615	**HECoS Code(s) and percentage split per programme/pathway** 100363 (30%) 100057 (50%) 101214 (20%)
External reference points The UK Quality Code for Higher Education - Part A: Setting and maintaining academic standards - Chapter A1: UK and European reference points for academic standards (October 2013) - incorporates the Frameworks for Higher Education Qualifications of UK Degree-Awarding Bodies (Qualification Frameworks), and - Subject Benchmark Statements - QAA Art & Design UG Benchmarks, 2016 - QAA Computing UG Benchmarks, 2016 Creative Skillset - Course Accreditation Guidelines - National Occupational Standards for Animation 2013 - The Core Skills of VFX Handbook	
Professional, Statutory and Regulatory Body (PSRB) links Eligible for accreditation by Creative Skillset. Not yet approved.	
Places of delivery Bournemouth University	
Mode(s) of delivery Full-time, Full-time sandwich (30 week placement)	**Language of delivery** English
Typical duration 3 years, or 4 years with a placement 1 year per level	
Date of first intake September 2017	**Expected start dates** September
Maximum student numbers 50	**Placements** All placements are optional. Students may choose to undertake a 30-week sandwich placement or an 8 week (40 day) 'short placement' between Level 5 and 6. Current practice is that students find their own placement with support from the Faculty Placements Team.

Partner(s) Not applicable	**Partnership model** Not applicable
Date of this Programme Specification Dec 2020 Students enrolling at Level 4 on or after September 2020 will follow this version.	
Version number v1.9-0920	
Approval, review or modification reference numbers E2017010 – approved 21/04/2017 FMC 1718 02 – approved 14/09/2017. Previously version 1.0 FMC 1718 11 – approved 20/12/2017. Previously version 1.1 FMC 1819 07, approved 07/03/2019, previously v1.2 BU 201819 01- approved 14/11/2018 previously version 1.3 FMC 1819 21 – approved 04/08/19 previously version 1.4 FMC 1920 12 – approved 16/12/19, previously version 1.5 FMC 1920 17 – approved 23/03/2020, previously version 1.6-0920 BU 2021 01 – approved 30/09/2020, previously version 1.7-0920 FMC 2021 04, approved 02/12/2020, previously v1.8-0920 FMC 2021 06, approved 02/12/2020, previously v1.9-0920	
Author A. Sarafopoulos	

PROGRAMME STRUCTURE

LEVEL 4		LEVEL 5		LEVEL 6	
S1	S2	S1	S2	S1	S2
Introduction to Production Tools (COMMON) 20	Technical Arts Production (CATA) 20	Visual Studies (CATA) 20	Group Project (COMMON) 20		FMP and Dissertation (COMMON) 60
Programming Principles (CATA) 20	Mathematics for Computer Graphics (CATA) 20	Advanced Mathematics for Computer Graphics (CATA) 20	Computing for Graphics and Animation (CATA) 20	Masterclass (COMMON) 20	
Visual Narrative and Design (CATA) 20	Moving Image Theory and Practice (COMMON) 20	Option 1 20	Option 2 20	Research and Development Project (COMMON) 20	Option 3 20

This map shows the order in which the units (listed in detail below) will be delivered across Levels 4, 5 and 6.

Programme Award and Title: BA (Hons) Computer Animation Technical Arts

Year 1/Level 4
Students are required to complete 6 core units.

Unit Name	Core/ Option	No of credits	Assessment Element Weightings			Expected contact hours per unit	Unit version no.	HECoS Subject Code
			Exam 1	Cwk 1	Cwk 2			
Introduction to Production Tools	Core	20		100%		72	FMC V1.1	615100363
Programming Principles	Core	20	50%	50%		72	FMC V1.1	I100100366
Visual Narrative and Design	Core	20		50%	50%	72	FMC V1.1	600100048(major) 100057(minor)
Technical Arts Production	Core	20		65%	35%	72	FMC 1.1	615100363
Mathematics for Computer Graphics	Core	20	100%			72	FMC V1.1	120101029
Moving Image Theory and Practice	Core	20		15%	85%	48	FMC V1.1	600101214 100057

Progression requirements: Requires 120 credits at Level 4.

Exit qualification: Cert HE Computer Animation Technical Arts (requires 120 credits at Level 4).

Year 2/Level 5
Students are required to complete 4 core units and two optional units. There are a number of options; however, from the available optional units only a subset will be offered every year, depending on take-up and availability of appropriate resources.

Unit Name .	Core/ Option	No of credits	Assessment Element Weightings			Expected contact hours per unit	Unit version no.	HECoS Subject Code
			Exam 1	Cwk 1	Cwk 2			
Visual Studies	Core	20		100%		72	FMC V1.1	600100057 100587
Advanced Mathematics for Computer Graphics	Core	20	100%			72	FMC V1.1	G120101029
Computing for Graphics and Animation	Core	20		100%		72	FMC V1.2	I100100366
Group Project	Core	20		100%		40	FMC V1.2	W615100363 100812
Character Rigging	Option	20		100%		50	FMC V1.1	W615100363
Visual Effects Acquisition	Option	20		60%	40%	48	FMC V1.1	W615100063 100717
Personal Inquiry	Option	20		100%		48	FMC V2.1	W600100363
Real-time Graphics Systems	Option	20		100%		48	FMC V1.1	I600100368
Technical Effects	Option	20		100%		48	FMC V1.2	W615100368
Lighting and Rendering	Option	20		100%		48	FMC V1.2	W615100363
Advanced Animation Techniques	Option	20		100%		50	FMC V1.1	G120100368
Principles of Rendering	Option	20		50%	50%	48	FMC V1.1	I100100368
Modelling and Texturing	Option	20		100%		48	FMC V1.0	W615100368
Advanced Moving Image Theory and Practice	Option	20		50%	50%	48	FMC V1.1	W600101214 100057
Scripting for DCC	Option	20		100%		48	FMC V1.0	

Progression requirements: Requires 120 credits at Level 5.

Exit qualification: Dip HE Computer Animation Technical Arts (requires 120 credits at Level 4 and 120 credits at Level 5).

Year 3/Level P - Optional sandwich placement in industry/business

Progression requirements: Requires satisfactory completion of a minimum 30-weeks of work in industry/business, the successful completion of an e-Portfolio summary, and the timely completion of two appraisal forms. Students who do not choose to undertake the optional sandwich placement may progress directly from Level 5 to Level 6.

Students may also choose to undertake an optional 8 week (40 day) 'short placement' between Level 5 and Level 6.

Year 3/4/Level 6
Students are required to complete 3 core units and one optional units. There are a number of options; however, from the available optional units only a subset will be offered every year, depending on take-up and availability of appropriate resources.

Unit Name	Core/ Option	No of credits	Assessment Element Weightings			Expected contact hours per unit	Unit version no.	HECoS Subject Code
			Exam 1	Cwk 1	Cwk 2			
Final Major Project and Dissertation	Core	60		100%		30	FMC V1.1	615100363(major) 101361(minor)
Masterclass	Core	20		100%		20	FMC V1.1	W615100363(major) 101277(minor)
Research and Development Project	Core	20		80%	20%	46	FMC V1.1	120100363
Digital Fabrication	Option	20		100%		40	FMC V1.2	615100368 100358
CG and Animation for Cultural Heritage	Option	20		70%	30%	42	FMC V1.2	615100363 100805
Non-fiction Animation	Option	20		100%		48	FMC V1.2	615100363 101214
Digital Matte Painting	Option	20		100%		48	FMC V1.1	615100363
Computer Vision and Image Processing	Option	20		100%		48	FMC V1.1	100968 101029

Exit qualification: BA (Hons) Computer Animation Technical Arts.

Sandwich UG award: Requires 120 credits at Level 4, 120 credits at Level 5, 120 credits at Level 6 and successful completion of a minimum 30-week sandwich placement.

Full-time UG award: Requires 120 credits at Level 4, 120 credits at Level 5 and 120 credits at Level 6.

AIMS OF THE DOCUMENT

The aims of this document are to:

- define the structure of the programme;
- specify the programme award titles;
- identify programme and level learning outcomes;
- articulate the regulations governing the awards defined within the document.

AIMS OF THE PROGRAMME

This section explains the rationale of the Computer Animation Technical Arts (CATA) programme. The structure of CATA reflects the interdisciplinary (and cross-disciplinary) nature of the Animation, Games, and visual Effects industries, where it is usual practice to have artists, animators, film directors, work together with a technical team of technical directors, engineers, and computer scientists in order to realise complex visual effects productions such as *Gravity*, *Avatar*, *Inception*, *Interstellar* and *EX Machina*, games like *Grand Theft Auto*, *Little Big Planet*, and Playdead's *Inside* and animated films like *Tangled* and *Monsters' University*, *Zootopia* and *Moana*.

In such productions the casts include people with a great variety of art and science backgrounds, as well as people with interdisciplinary skills in order to allow for the complex and high quality visuals required to realise the directors' vision, and in order to support the actors' or animated characters' performances. Animation directors and artists will typically have a film school or animation background, and engineers and computer scientists will have a corresponding science background; technical directors and technical artists are people that bridge the gap between the art and science disciplines and will have strong interdisciplinary skills (creative and technical) in order to allow creative and technical teams of a complex production to work together. The cross disciplinary nature of the industry is often referred to as the 'skills spectrum', and CATA is designed to fit within this spectrum, balancing between the arts/film and engineering/computer science divide.

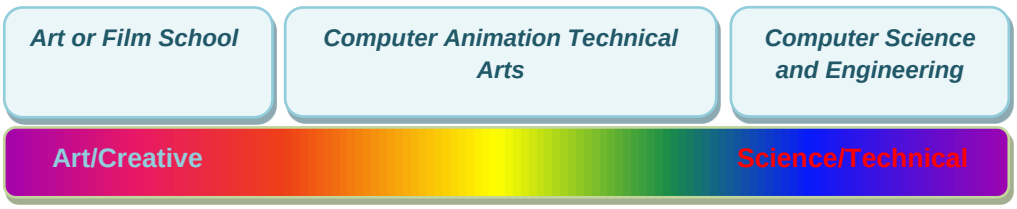

Illustration 1: The Skills Spectrum

Computer Animation Technical Arts (CATA) is an interdisciplinary Computer Animation Programme focusing on producing graduates whose profiles match the role of Technical Director and Technical Artist in the Computer Animation, VFX and Computer Games industries. Technical directors and technical artists are people that combine knowledge of art theory, animation techniques and applied maths and computing needed to satisfy the demands of modern (computer animation, film, VFX and games) production. They combine strong technical and creative skills and can work to bridge the gap between the Art/Animation Director and Game Designer and the technology required to fulfil their vision. They are artists that are able to understand the technical constraints and their aesthetic implications and can develop technical tools and algorithms used in production. Computer Animation Technical Arts (CATA) graduates are artists on their own right albeit they can create artworks with computer code.

This programme aims to develop critically informed, agile and resourceful graduates, who:

- are critically aware of art aesthetics and the aesthetics of film and animation and can place them in a historical context;
- have an in depth understating of modern computing technology and mathematics used in their field;
- have an in depth understanding of the principles of modern production in the animation, VFX, and computer games industries;
- develop a personal style and are critically aware of aesthetic choices and their impact upon their practice;
- have highly-developed interpersonal skills and are able to manage their personal development and lifelong learning.

As this is an interdisciplinary programme the type of units taught to achieve the above aims can be classified in three broad categories: (a) technical theory and principles, (b) production principles, and (c) art theory and practice (illustration 2).

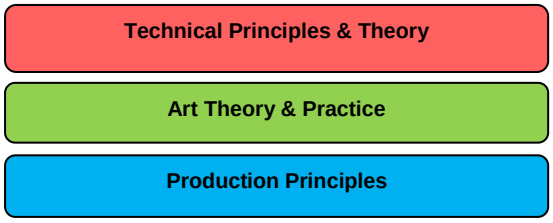

Illustration 2: The type of units taught can be classified in three broad categories

At Level 4 and Level 5 of the framework we deliver subjects that are traditionally taught under the umbrella of engineering and computing as well as subjects that are regularly taught in a film school or an art school. For example at Level 4, units covering 'Programming Principles' and 'Mathematics for Computer Graphics' have a strong computing and mathematical flavour and at the same time units such as 'Visual Narrative and Design' and 'Moving Image Theory and Practice' have the equivalent artistic and film studies flavour.

The CATA programme emphasises the common practice and shared production principles across the disciplines (and industries) of computer animation, computer games, and film digital effects. This commonality and shared practice is captured by a set of core units taught to all undergraduate students that join this programme at Level 4 (year 1) and which form a backbone of the production units that run throughout the programme. At Level 5 (year 2) the programme offers an array of more specialised options which reflect the versatile nature of the production in Computer Animation, Visual Effects and Computer Games industries, including real-time engines, compositing and acquisition, rendering, animation and rigging, data and motion capture. At level 5 we also place emphasis at group work and collaboration with the core Group Project unit. Students after Level 5 can opt for a 30-week placement; a placement can provide added focus to their chosen discipline as well as valuable work experience before they return to complete their honours degree. The Level 6 (year 3) of the programme is mostly student lead and culminates in the Final Major Project and Dissertation unit which combines and integrates all previous units see illustration 3.

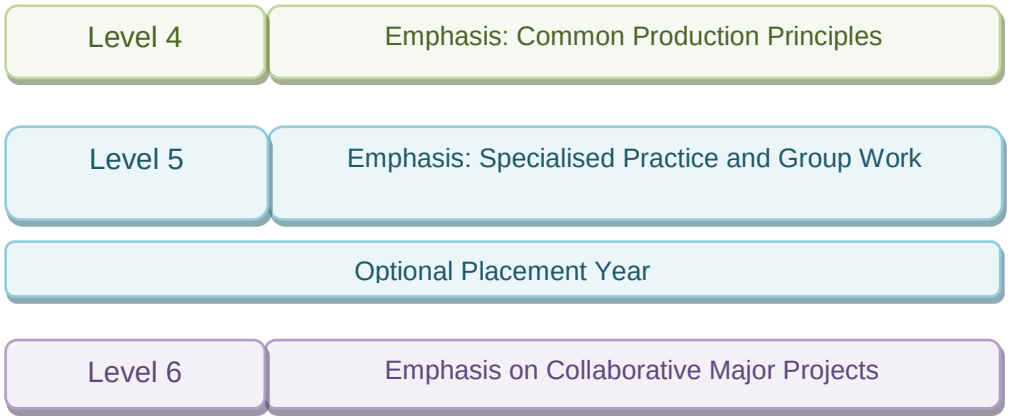

Illustration 3: Organisation of units at different levels.

ALIGNMENT WITH THE UNIVERSITY'S STRATEGIC PLAN

The BU 2012-18 Strategic Plan is built around the concept of Creating, Sharing and Inspiring and can be better defined as:

- Creating the most stimulating, challenging, and rewarding university experience in a world-class learning community
- Sharing our unique fusion of excellent education, research and professional practice
- Inspiring our students, graduates and staff to enrich the world

Like all of the courses that are part of this portfolio, this course embraces all of these values and adopts every aspect of this agenda.

In line with the Curriculum Content section of the EDQ document *2B – Programme Structure and Curriculum Design Characteristics: Procedure*, the development of graduate attributes including the following areas have been considered in the design of the course:

- Education including technology enhanced learning
- Employability, work-based learning and professional practice
- Research informed education
- Student engagement and co-creation
- Innovation, entrepreneurship and creativity
- Globalisation, internationalisation and sustainability
- Personal and professional development

At the very heart of the course is the concept of education, professional practice and research. All of the delivery is underpinned by industry practice in regard to curriculum design, right through to the production pipelines that students learn and consequently develop on their own terms. Research disciplines are taught and learned in specific units and these skills are utilised on other units throughout each programme. Teaching is at the centre of all of this work, and the NCCA prides itself on the quality of its teaching and organisation of its delivery to maximise student potential.

The NCCA has been at the forefront of utilising technology to enhance teaching and learning. Using platforms such as Shotgun (an industry standard file sharing and monitoring tool) enables staff to offer frame-by-frame feedback and annotation of student work. This happens as part of the ongoing review of student work-in-progress.

Staff also use tools such as Turnitin and video to give students a tailored and personal review of their work, which has been incredibly well received.

The inclusion of weekly visiting speakers enables staff and students to engage with practitioners on a scale that students in other institutions are unable to do. Networks with industry are incredibly strong and the fact that a huge number of people employed in the industry are NCCA graduates makes it very straightforward to maintain and build those networks. There is a huge loyalty to the NCCA and it is important that loyalty remains and is utilised to the benefit of current and future students.

Staff are able to go and work within some of the companies we regularly deal with, enabling them to come back to the classroom and share the skills that they develop whilst in the professional environment. Industry colleagues and partners make contributions to the NCCA Industry Advisory Board, where many subjects are discussed on a regular basis, including curriculum design.

Course accreditation from Creative Skillset also enables us to take advantage of their networks and guidance in order to ensure curriculum design is mapping to current and future thinking as far as possible.

Many staff that deliver on the courses are active researchers and bring that experience into the classroom. Through assignments and research oriented units, all students experience research and are able to see whether further work in that area is something they might develop in the future. Students work in groups for some of their marked assignments, allowing them to see and understand how major productions like those they will eventually work on are made. Teamwork is critical and that part of the student experience is critical to the success of NCCA graduates when they begin their careers.

Students are exposed to the world of work in all its facets. Getting a job in computer animation, games or visual effects is competitive, so students are made aware of the need to develop their skills and be in a position to demonstrate them in a way that enables them to challenge for opportunities. They are exposed to the reality that means they may need to work in a freelance capacity or even start their own business.

Students come from a wide range of countries and cultures, which does need careful management. However, the mix of cultures is seen as hugely beneficial to the student experience as it creates an incredibly interesting and vibrant student community that only serves to enhance the creativity of the group as a whole.

The Global agenda is further enhanced by the opportunities students have to visit events like FMX in Germany and meet with other students and professionals from around the world at our very own BFX Festival.

The NCCA has engaged with CEL (BUs Centre for Excellence in Learning) as part of the curriculum design process. More importantly, the Department will continue to work with CEL after validation in order to ensure the new courses are delivered and assessed in a way that enables students to have the very best experience they can when they come to BU to learn in the NCCA.

CEL has engaged Academic Learning Designers who will work with the Department to ensure that the programmes that have been designed are delivered in a way that is not only appropriate in terms of the discipline, but in such a way as to take advantage of the latest innovations in teaching and learning in Higher Education.

At all times, students are reminded that a professional attitude to their work, their colleagues and their lecturers is critical to their success. Recruiters from major studios go to great lengths to remind them that once they have the requisite skills, the next thing a company looks for in an employee is their ability to fit into their workplace with ease. In the kind of environment that most of the graduates will work, being a productive and valued member of a team is absolutely paramount.

The University's move to a common academic structure (CAS) began in the 2012/13 academic year, with all courses moving wholly into CAS or, in the case of some undergraduate provision, cascading through the period of an entire cohort's time on a course.

As part of this design, all NCCA Undergraduate degrees will move into CAS, with the exception of the Final Major Project and Dissertation Unit which is a recognised exception.

LEARNING HOURS AND ASSESSMENT

Bournemouth University taught programmes are composed of units of study, which are assigned a credit value indicating the amount of learning undertaken. The minimum credit value of a unit is normally 20 credits, above which credit values normally increase at 20-point intervals. 20 credits is the equivalent of 200 study hours required of the student, including lectures, seminars, assessment and independent study. 20 University credits are equivalent to 10 European Credit Transfer System (ECTS) credits.

As a general rule, time devoted to assessment should normally represent approximately 25% of the student learning time for a unit (i.e. 50 hours for a 20-credit unit), leaving the rest for specific programme-related activities, including lectures, seminars, preparatory work, practical activities, reading, critical reflection and independent learning.As a guideline, a 20-credit unit would normally require the equivalent of approximately 3,000 words in total.

STAFF DELIVERING THE PROGRAMME

Students will usually be taught by a combination of senior academic staff with others who have relevant expertise including – where appropriate according to the content of the unit – academic staff, qualified professional practitioners, demonstrators/technicians and research students.

INTENDED LEARNING OUTCOMES – AND HOW THE PROGRAMME ENABLES STUDENTS TO ACHIEVE AND DEMONSTRATE THE INTENDED LEARNING OUTCOMES

The BA (Hons) Computer Animation Technical Arts provides opportunities for students to develop and demonstrate knowledge, understanding and skills described in this section. After their graduation, students will be expected to demonstrate self-direction and originality in tackling and solving problems, and act autonomously in planning and implementing tasks at a professional level.

After completion of Level 4 of the programme CATA students should have knowledge and understanding of the underlying production principles and practice in computer visualisation, animation and computer games as well as elements and fundamental principles of computing and applied maths required in visual effects and animation practice. Students at this level will be expected to be able to evaluate and interpret different approaches to visualising, modelling and animating ideas or concepts presented to them in the form of scripts, storyboards, or scenes. Students should also be able to place computer animation and film visual effects work in historical and aesthetic context.

After successful completion of Level 5 of the programme students should be able to demonstrate knowledge and critical understanding of well-established principles in computer animation. The students will be able to apply underlying principles in the context of given visual effects or animation tasks, and outside the margin within which these principles were initially taught or introduced to them. Students will be expected to understand the importance of practical limitations, in terms of time and the resources required, to successfully complete a given project. They should also be able to demonstrate understanding of the appropriateness of a technique as applied to a given production task and research such techniques using publications in magazines, journals, conferences, festivals or other bibliographic sources. Students should be able to manage their own personal development by directing and tailoring their studies according to their choice of specialised options available.

At Level 6 students are expected to demonstrate practice based research skills as part of the Research and Development Project unit. Students at this level will focus on specialist theory and practice in one of the available optional units as well as the Masterclass unit. The Major Project & Dissertation unit will act as a platform for cross disciplinary productions and encourage collaboration across programmes.

PROGRAMME AND LEVEL 6 INTENDED PROGRAMME OUTCOMES

A: Subject knowledge and understanding This programme/level provides opportunities for students to develop and demonstrate knowledge and understanding of*:*	The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the programme/level learning outcomes:
A1 research methods and languages used to discuss the moving image and art, science and technology; **A2** theories, concepts, and principles of computer animation and computer graphics algorithms and techniques; **A3** the principles and practice of computer animation and computer graphics production; **A4** the research, design and implementation of computer generated assets and tools with a production pipeline; **A5** technical direction and computer graphics and animation pipeline development.	Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes): • lectures (A1 – A5); • seminars & workshops (A1 – A5); • directed reading (A1, A5); • use of the VLE (A4, A5); • independent research (for dissertation) (A5).
	Assessment strategies and methods (referring to numbered Intended Learning Outcomes): • coursework essays (A1 – A4); • dissertation (A5).
B: Intellectual skills This programme/level provides opportunities for students to:	The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the programme/level outcomes:
B1 develop critical analysis of work in the field of computer graphics and animation; **B2** place their personal work in the correct technical and historical context; **B3** produce creative work that demonstrates an appropriate level of originality and professional quality; **B4** demonstrate a sound understanding of the theory that underpins computer graphics and animation; **B5** plan production and illustrate the capacity for critical and effective research.	Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes): • lectures (B4); • seminars (B1 – B4); • directed reading (B1 - B5); • use of the VLE (B5); • independent research (for dissertation) (B1 - B5).
	Assessment strategies and methods (referring to numbered Intended Learning Outcomes): • examinations (B4); • coursework essays (B1 - B5); • dissertation (B1 - B5).
C: Practical skills This programme/level provides opportunities for students to develop practical skills:	The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the programme/level learning outcomes:
	Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):

C1 in the expert use of software and tools appropriate to their discipline; **C2** in the proficiency of the application of animation production techniques; **C3** to identify and apply the correct techniques for computer graphics and animation production pipe-line that satisfy given aesthetic style and production constraints; **C4** in software design and implementation of computer graphics systems.	• lectures (C1 – C4); • coursework essays (C1 - C4); • independent research for empirical dissertation (C1 – C4). Assessment strategies and methods (referring to numbered Intended Learning Outcomes): • coursework essays (C1 – C4).
D: Transferable skills This programme/level provides opportunities for students to:	The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the programme/level learning outcomes:
D1 plan and execute visual productions to a given time-scale; **D2** communicate artistic and aesthetic intent to colleagues and clients; **D3** work effectively within a production pipeline; **D4** work effectively as a member of a team; **D5** work effectively in the planning and production of critical written reports.	Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes): • lectures (D1 - D5); • seminars (D1- D5); • directed reading (D1- D5). Assessment strategies and methods (referring to numbered Intended Learning Outcomes): • coursework essays (D1 – D5); • dissertation (D2- D5).

LEVEL 5/DipHE INTENDED LEVEL OUTCOMES

A: Knowledge and understanding This level provides opportunities for students to develop and demonstrate knowledge and understanding of*:*	The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the level/stage learning outcomes:
A1 research methods and languages used to discuss the moving image and art, science and technology; **A2** theories, concepts, and principles of computer animation and computer graphics algorithms and techniques; **A3** the principles and practice of computer animation and computer graphics production; **A4** the research, design and implementation of computer generated assets and tools with a production pipeline; **A5** technical direction and computer graphics and animation pipeline development.	Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes): • lectures (A1- A5); • seminars (A1 – A5); • directed reading (A3); • use of the VLE (A3). Assessment strategies and methods (referring to numbered Intended Learning Outcomes): • examinations (A2, A4, A5); • coursework essays (A1 – A5).
B: Intellectual skills This level provides opportunities for students to:	The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the level learning outcomes:
B1 develop critical analysis of the work in the field of the computer graphics and animation; **B2** place their personal work in the correct technical and historical context; **B3** produce creative work that demonstrates an appropriate level of originality and professional quality; **B4** demonstrate a sound understanding of the theory that underpins computer graphics and animation; **B5** plan and illustrate the capacity for critical and effective research.	Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes): • lectures (B1 - B4); • seminars (B1 – B4); • directed reading (B1 – B5); • use of the VLE (B3); • independent research (B1 - B5). Assessment strategies and methods (referring to numbered Intended Learning Outcomes): • examinations (B4); • coursework essays (B1 - B5).
C: Practical skills This level provides opportunities for students to:	The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the level/stage learning outcomes:
C1 demonstrate the successful use of software and tools appropriate to their discipline; **C2** develop proficiency in the application of animation production techniques;	Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes): • seminars (C1 – C4); • coursework essays (C1 – C4); • lectures (C4).

C3 identify and apply the correct techniques for computer graphics and animation production pipe-line that satisfy an aesthetic style and production constrains; **C4** understand software design and implementation of computer graphics systems.	Assessment strategies and methods (referring to numbered Intended Learning Outcomes): • coursework essays (C1-C4); • examination (C4).
D: Transferable skills This level provides opportunities for students to:	The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the level/stage learning outcomes:
D1 plan and execute visual productions to a given time-scale; **D2** communicate artistic and aesthetic intent to colleagues and clients; **D3** work effectively within a production pipeline; **D4** work effectively as a member of a team.	Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes): • seminars (D1- D4); • use of the VLE (D1 - D4); • directed reading (D1- D4). Assessment strategies and methods (referring to numbered Intended Learning Outcomes): • coursework essays (D1 - D4).

LEVEL 4/Cert HE INTENDED LEVEL OUTCOMES

A: Knowledge and understanding This level provides opportunities for students to develop and demonstrate knowledge and understanding of:	The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the level/stage learning outcomes:
A1 research methods and languages used to discuss the moving image and art, science and technology; **A2** theories, concepts, and principles of computer animation and computer graphics algorithms and techniques; **A3** the principles and practice of computer animation and computer graphics production; **A4** research, design and implementation of computer generated assets and tools with a production pipeline; **A5** technical direction and computer graphics and animation pipeline development.	Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes): • lectures (A1- A5); • seminars (A1 – A4); • use of the VLE (A3, A5). Assessment strategies and methods (referring to numbered Intended Learning Outcomes): • examinations (A3, A5); • coursework essays (A2 – A5).
B: Intellectual skills This level provides opportunities for students to:	The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the level/stage learning outcomes:
B1 develop a critical analysis of the work in the field of the computer graphics and animation; **B2** produce creative work that demonstrates an appropriate level of professional quality and some originality; **B3** demonstrate a sound understanding of the theory that underpins computer graphics and animation.	Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes): • lectures (B1 – B3); • seminars (B1 – B3); • use of the VLE (B2). Assessment strategies and methods (referring to numbered Intended Learning Outcomes): • examinations (B3); • coursework essays (B1 – B3).
C: Practical skills This programme/level provides opportunities for students to develop practical skills:	The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the level/stage learning outcomes:
C1 in the successful use of software and tools appropriate to their discipline; **C2** and proficiency in the application of animation production techniques;	Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes): • lectures (C1 – C4); • coursework essays (C1 – C4).

C3 to identify and apply the correct techniques for computer graphics and animation production pipe-line that satisfy an aesthetic style and production constraints; **C4** and demonstrate an understating of software design and implementation of computer graphics systems.	Assessment strategies and methods (referring to numbered Intended Learning Outcomes): • examinations (C4); • coursework essays (C1 – C4).
D: Transferable skills This level provides opportunities for students to:	The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the level/stage learning outcomes:
D1 plan and execute visual productions to a given time-scale; **D2** communicate artistic and aesthetic intent to colleagues and clients; **D3** work effectively within a production pipeline.	Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes): • seminars (D1- D3); • use of the VLE (D1 – D3).
	Assessment strategies and methods (referring to numbered Intended Learning Outcomes): • coursework essays (D1 – D3).

ADMISSION REGULATIONS

The regulations for this programme are the University's Standard Undergraduate Admission Regulations with the following exception:

- Applicants whose mother tongue is not English must offer evidence of qualifications in written and spoken English, equivalent to IELTS (Academic) with an overall score of 6.0 or above, with a minimum of 5.5 in each of the four component scores.

PROGRESSION ROUTES

Not applicable.

ASSESSMENT REGULATIONS

The regulations for this programme are the University's Standard Undergraduate Assessment Regulations. The University's Standard Undergraduate Assessment Regulations are available from: https://intranetsp.bournemouth.ac.uk/pandptest/6a-standard-assessment-regulations-undergraduate.pdf

WORK BASED LEARNING (WBL) AND PLACEMENT ELEMENTS

This programme incorporates a one-year (30 week) optional sandwich placement, and the alternative option of an 8 week (40 day) 'short placement'. Those students who successfully complete the 30 week sandwich placement will be eligible for the award of full-time sandwich degree. Placements are not credit bearing and are not required for the award of intermediate qualifications.

Programme Skills Matrix

Core units in bold. All other units are options available to this programme.

	Units	Programme Intended Learning Outcomes																	
		A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	C1	C2	C3	C4	D1	D2	D3	D4	D5
LEVEL 6	**Final Major Project and Dissertation**	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Research and Development Project	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x
	Masterclass	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x		
	Digital Fabrication	x	x	x	x	x	x		x	x	x	x	x	x	x	x		x	x	x
	Computer Vision and Image Processing		x	x	x				x	x	x	x	x	x	x	x		x	x	
	Digital Matte Painting			x	x	x	x	x	x			x	x	x		x	x		x	
	Non-fiction Animation	x		x	x		x	x	x	x			x	x	x	x		x	x	x
	CG and Animation for Cultural Heritage	x		x	x		x	x		x	x		x	x	x				x	x
LEVEL 5	**Visual Studies**	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Advanced Mathematics for Computer Graphics		x	x		x		x		x	x	x		x	x	x			x	
	Computing for Graphics and Animation		x	x		x		x		x	x	x		x	x	x			x	
	Group Project	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	Visual Effects Acquisition	x		x	x	x	x	x	x			x	x	x		x	x		x	
	Technical Effects	x		x	x		x	x	x			x	x	x		x	x		x	
	Personal Inquiry	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	Advanced Animation Techniques	x	x	x	x	x			x	x	x	x	x	x	x	x		x	x	
	Lighting and Rendering			x	x	x	x	x	x			x	x	x		x	x		x	

	Character Rigging	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	Real-time Graphics Systems	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x	
	Principles of Rendering	x	x	x	x	x	x		x	x	x	x	x	x	x	x		x	x	
	Advanced Moving Image Theory and Practice	x		x	x		x	x	x	x		x	x	x	x	x		x	x	
	Modelling and Texturing	**X**				**X**		**X**	**X**			**X**	**X**		**X**			**X**		
	Scripting for DCC	x	x	x		x	x	x	x	x	x	x	x	x		x	x	x	x	x
L E V E L 4	**Introduction to Production Tools**	x		x	x							x	x	x		x				
	Programming Principles		x	x			x					x	x	x		x				
	Visual Narrative and Design	x		x	x	x	x	x	x			x	x	x		x	x	x		
	Technical Arts Production	x	x	x	x	x	x	x	x			x	x	x	x	x	x	x		
	Mathematics for Computer Graphics	x	x			x	x					x			x					
	Moving Image Theory and Practice	x		x	x		x	x	x					x	x	x		x		

A – Subject Knowledge and Understanding
This programme provides opportunities for students to develop and demonstrate knowledge and understanding:

A1 have a detailed knowledge and understanding of research methods and languages used to discuss the moving image and art, science and technology;

A2 have a detailed knowledge and understanding of theories, concepts, and principles of computer animation and computer graphics algorithms and techniques;

A3 have a detailed knowledge and understanding of the principles and practice of computer animation and computer graphics production;

A4 have a detailed knowledge and understanding of the research, design and implementation of computer generated assets and tools with a production pipeline.;

A5 have a detailed knowledge and understanding of technical direction and computer graphics and animation pipeline development.

C – Practical Skills
This programme provides opportunities:

C1 in the expert use of software and tools appropriate to their discipline;

C2 in the proficiency of the application of animation production techniques;

C3 to identify and apply the correct techniques for computer graphics and animation production pipe-line that satisfy given aesthetic style and production constraints;

C4 in software design and implementation of computer graphics systems.

B – Intellectual Skills This programme provides opportunities:	**D – Transferable Skills** This programme provides opportunities:
B1 for developing critical analysis of the work in the field of the computer graphics and animation B2 for placing their personal work in the correct technical and historical context; B3 for the production of creative work that demonstrates an appropriate level of originality and professional quality; B4 in sound understanding of the theory that underpins computer graphics and animation; B5 in production planning and illustrating the capacity for critical and effective research.	D1 plan and execute visual productions to a given time-scale; D2 communicate artistic and aesthetic intent to colleagues and clients; D3 work effectively within a production pipeline; D4 work effectively as a member of a team; D5 work effectively in the planning and production of critical written reports.