



**KEY PROGRAMME INFORMATION**

<b>Originating institution(s)</b> Bournemouth University		<b>Faculty responsible for the programme</b> Faculty of Media and Communication	
<b>Final award(s), title(s) and credits</b> MSc Computer Animation and Visual Effects (180 credits / 90 ECTS credits Level 7)			
<b>Intermediate award(s), title(s) and credits</b> PG Diploma Computer Animation and Visual Effects 120 Credits / 60 ECTS Credits Level 7 PG Cert Computer Animation and Visual Effects 60 credits/ 30 ECTS Credits level 7			
<b>UCAS Programme Code(s) (where applicable and if known)</b>		<b>HECoS (Higher Education Classification of Subjects) Code and balanced or major/minor load.</b> 100363	
<b>External reference points</b> The revised UK Quality Code for Higher Education published May 2018 including: <ul style="list-style-type: none"> <li>- Expectations and practices for standards and for quality.</li> <li>- Advice and Guidance published in November 2018</li> </ul> QAA Subject Benchmark Statements <ul style="list-style-type: none"> <li>- QAA Art &amp; Design UG Benchmarks, 2016</li> <li>- QAA Computing UG Benchmarks, 2016</li> </ul> Creative Skillset <ul style="list-style-type: none"> <li>- National Occupational Standards for Animation 2013</li> <li>- The Core Skills of VFX Handbook</li> </ul>			
<b>Professional, Statutory and Regulatory Body (PSRB) links</b> None			
<b>Places of delivery</b> Bournemouth University			
<b>Mode(s) of delivery</b> Full Time		<b>Language of delivery</b> English	
<b>Typical duration</b> 12 months (3 Semesters)			
<b>Date of first intake</b> September 2021		<b>Expected start dates</b> September	
<b>Maximum student numbers</b> 25		<b>Placements</b> Masters Project (in S3) with optional placement with duration up to 3 month. It is the student's responsibility for arranging the placement, and it will need to be discussed with and approved by the course / unit leader	
<b>Partner(s)</b> N/A		<b>Partnership model</b> N/A	
<b>Date of this Programme Specification</b> May 2023			
<b>Version number</b> V1.1-0924			
<b>Approval, review or modification reference numbers</b>			

## Programme Specification - Section 2

E192003  
EC 2021 15, approved 05/03/2021  
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FMC 2223 20, approved 21/06/2023, previously version 1.0 -0923

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**PROGRAMME STRUCTURE**

<b>Programme Award and Title: MSc Computer Animation and Visual Effects</b>								
<b>Stage 1 /Level 7</b>								
Unit Name	Core/ Option	No. of Credits	Assessment Element Weightings			Expected Contact hours per unit	Unit Version No.	HECoS Code (plus balanced or major/ minor load)
			Exam 1	Cwk 1	Cwk 2			
Animation Software Engineering  (CGI Techniques is a co-requisite for this unit)	Core	20	0	100	0	72	1.0	100363
CGI Tools	Core	20	0	50	50	48	1.1	100363
CGI Techniques  (Animation Software Engineering; CGI Tools are co-requisites for this unit)	Core	20	0	100	0	48	1.0	100363
Simulation and Rendering	Core	20	0	50	50	48	1.0	100363
Pipeline and Technical Direction  (Animation Software Engineering and CGI Techniques are co-requisites for this unit)	Core	20	0	100	0	48	1.0	100363
Group Project  (CGI Tools and Animation Software Engineering are pre-requisites for this unit)	Core	20	0	10	90	40	1.0	100363
<b>Progression requirements:</b> Students are required to successfully complete 120 level 7 Credits to proceed to the MSc Project unit								
<b>Exit qualification:</b> PG Cert Computer Animation and Visual Effects requires 60 credits PG Diploma Computer Animation and Visual Effects requires 120 credits								

<b>Stage 2/Level 7</b>								
Unit Name	Core/ Option	No. of Credits	Assessment Element Weightings			Expected Contact hours per unit	Unit Version No.	HECoS Code (plus balanced or major/ minor load)
			Exam 1	Cwk 1	Cwk 2			
MSc CAVE master project  (Successful completion of 120 Level 7 credits of MSc Computer Animation and Visual Effects is a pre-requisite for students undertaking this unit)	Core	60	0	100		20	1.0	100363
<b>Exit qualification: MSc computer Animation and Visual Effects requires 180 credits</b>								

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### 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

The aim of the MSc Computer Animation and Visual Effects Pathway is to enable students to become competent in the technical aspects of computer animation and produce graduates with the range and depth of technical skills necessary to become future Technical Directors within the computer animation and computer games sectors.

The programme compliments the other Masters courses within the NCCA and MA and MSc students are encouraged to collaborate in integrated projects to promote an interdisciplinary environment, a common culture and emulate business practice.

The programme aims to develop in students:

- ◇ a knowledge and professional competence through the study and application of the theories, methods and practices of computer animation
- ◇ a creative and innovative approach to the analysis and solution of problems in computer animation productions
- ◇ an understanding of the inter-relation of aesthetic, perceptual and technical factors involved in the development of computer animation productions
- ◇ an awareness of new application areas relating to the use of computer animation productions
- ◇ an attitude of self-reliance and self-discipline in the subject area as well as a capacity to collaborate with other members of an interdisciplinary team

A further emphasis on the application of technical, mathematical and algorithmic skills is placed on the MSc programme where students are encouraged to develop tools to aid in the production of animation / games artefacts as well as transferable technical and programming skills which are applicable to other areas of the modern technical world.

### ALIGNMENT WITH THE UNIVERSITY'S STRATEGIC PLAN

With its fusion of Art, Science and technology the MSc Computer Animation and Visual Effects is ideally suited to fulfil the Strategic Investment Area of Animation, Simulation & Visualisation as outlined by the BU2025 strategy.

The NCCA's world leading research and research staff deliver a number of units on the MSc and this feeds directly into the curriculum ensuring industry and research needs are met. A number of MSc students have continued work started on the MSc course into PhD degrees.

A core theme within the MSc CAVE is the application of Digital Technology as a transferable skill, whilst most of the teaching is focused on Animation and Visual Effects these skills and engineering techniques are transferable to other industries within the technological sector.

The MSc CAVE has always been a very inclusive programme with a strong international reputation and a very positive gender balance for a predominantly technical programme.

Graduates from the MSc CAVE are very much in demand from the animation industry due to the combination of programming skills and knowledge of DCC tools and pipelines. It is not uncommon for

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MSc students to be offered jobs before the completion of the MSc project this is thanks to our close links to industry and the reputation of the MSc graduates within the industry.

### **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.

The assessment workload for a unit should consider the total time devoted to study, including the assessment workload (i.e. formative and summative assessment) and the taught elements and independent study workload (i.e. lectures, seminars, preparatory work, practical activities, reading, critical reflection).

Assessment per 20 credit unit should normally consist of 3,000 words or equivalent. Dissertations and Level 6 and 7 Final Projects are distinct from other assessment types. The word count for these assignments is 5,000 words per 20 credits, recognising that undertaking an in-depth piece of original research as the capstone to a degree is pedagogically sound.

### **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**

**MSc Computer Animation and Visual Effects  
INTENDED PROGRAMME OUTCOMES**

<p><b>A: Subject knowledge and understanding</b></p> <p>This programme provides opportunities for students to develop and demonstrate knowledge and understanding of:</p>	<p>The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the programme learning outcomes:</p>
<p><b>A1</b> the languages used to discuss the moving image and art, science and technology;</p> <p><b>A2</b> the fundamentals of computer graphics;</p> <p><b>A3</b> the techniques applicable to their own practice;</p> <p><b>A4</b> Mathematics and algorithms for computer graphics;</p> <p><b>A5</b> Software development and engineering techniques for technical direction and the CGI pipeline.</p>	<p>Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> <li>• seminars (A1 – A4);</li> <li>• independent research (A1-5).</li> </ul> <p>Assessment strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> <li>• MSc Project (A1-A5).</li> </ul>
<p><b>B: Intellectual skills</b></p> <p>This programme provides opportunities for students to:</p>	<p>The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the programme outcomes:</p>
<p><b>B1</b> develop critical analysis of work in the field of moving image;</p> <p><b>B2</b> contextualize personal practice critically, technically and historically;</p> <p><b>B3</b> select and evaluate the correct techniques / tools for the production of an asset / project</p> <p><b>B4</b> autonomously identify and solve CGI problems by the application of software techniques and the synthesis of current research.</p>	<p>Learning and teaching strategies and methods:</p> <ul style="list-style-type: none"> <li>• seminars (B1 – B4);</li> <li>• directed reading (B1 – B4);</li> <li>• independent research (B4).</li> </ul> <p>Assessment strategies and methods:</p> <ul style="list-style-type: none"> <li>• MSc Project (B1-B4).</li> </ul>
<p><b>C: Practical skills</b></p> <p>This programme provides opportunities for students to:</p>	<p>The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the programme learning outcomes:</p>
<p><b>C1</b> become expert in the use of software and tools appropriate to their discipline;</p> <p><b>C2</b> demonstrate a mastery of computer programming languages and application programming interfaces for CGI production;</p> <p><b>C3</b> identify and apply the correct techniques for CGI production and pipelines either individually or as a group;</p>	<p>Learning and teaching strategies and methods:</p> <ul style="list-style-type: none"> <li>• Practical assignments (C1 – C4);</li> </ul> <p>Assessment strategies and methods:</p> <ul style="list-style-type: none"> <li>• MSc Project (C1-C4).</li> </ul>

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<p><b>C4</b> To communicate effectively with artists in the development and application of animation tools and techniques;</p>	
<p><b>D: Transferable skills</b></p> <p>This programme provides opportunities for students to:</p>	<p>The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the programme learning outcomes:</p>
<p><b>D1</b> plan,organise and produce a project to a given time-scale;</p> <p><b>D2</b> work effectively as a member of a team communicating with peers, supervisors and others;</p> <p><b>D3</b> apply personally motivated research, independent learning and problem solving abilities required for continuing professional developm;</p> <p><b>D4</b> demonstrate the application of engineering principles to solve technical problems in a chosen field;</p>	<p>Learning and teaching strategies and methods:</p> <ul style="list-style-type: none"> <li>• seminars (D1- D4);</li> <li>• directed reading (D1- D4).</li> </ul> <p>Assessment strategies and methods:</p> <ul style="list-style-type: none"> <li>• MSc project (D1- D4)</li> </ul>

### PG Dip INTENDED OUTCOMES

<p><b>A: Subject knowledge and understanding</b></p> <p>This Level provides opportunities for students to develop and demonstrate knowledge and understanding of:</p>	<p>The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the programme learning outcomes:</p>
<p><b>A1</b> the languages used to discuss the moving image and art, science and technology;</p> <p><b>A2</b> the fundamentals of computer graphics;</p> <p><b>A3</b> the techniques applicable to their own practice;</p> <p><b>A4</b> Mathematics and algorithms for computer graphics;</p> <p><b>A5</b> Software development and engineering techniques for technical direction and the CGI pipeline.</p>	<p>Learning and teaching strategies and methods:</p> <ul style="list-style-type: none"> <li>• lectures (A1 – A5);</li> <li>• seminars (A1 – A4);</li> <li>• directed reading (A2, A4);</li> <li>• use of the VLE (A1);</li> <li>• independent research (A1-5).</li> </ul> <p>Assessment strategies and methods:</p> <ul style="list-style-type: none"> <li>• Practical assignments (A1-A5);</li> <li>• coursework essays (A4);</li> </ul>
<p><b>B: Intellectual skills</b></p> <p>This programme provides opportunities for students to:</p>	<p>The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the programme outcomes:</p>
<p><b>B1</b> develop critical analysis of work in the field of moving image;</p>	<p>Learning and teaching strategies and methods:</p> <ul style="list-style-type: none"> <li>• lectures (B1 - B4);</li> </ul>

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<p><b>B2</b> contextualize personal practice critically, technically and historically;</p> <p><b>B3</b> select and evaluate the correct techniques / tools for the production of an asset / project</p> <p><b>B4</b> autonomously identify and solve CGI problems by the application of software techniques and the synthesis of current research.</p>	<ul style="list-style-type: none"> <li>• seminars (B1 – B4);</li> <li>• directed reading (B1 – B4);</li> <li>• use of the VLE (B1 – B3);</li> <li>• independent research (B4).</li> </ul> <p>Assessment strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> <li>• Practical Assignments (B1 – B4);</li> </ul>
<p><b>C: Practical skills</b></p> <p>This Level provides opportunities for students to:</p>	<p>The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the programme learning outcomes:</p>
<p><b>C1</b> become expert in the use of software and tools appropriate to their discipline;</p> <p><b>C2</b> demonstrate a mastery of computer programming languages and application programming interfaces for CGI production;</p> <p><b>C3</b> identify and apply the correct techniques for CGI production and pipelines either individually or as a group;</p> <p><b>C4</b> To communicate effectively with artists in the development and application of animation tools and techniques;</p>	<p>Learning and teaching strategies and methods:</p> <ul style="list-style-type: none"> <li>• lectures (C1 - C3);</li> <li>• Practical assignments (C1 – C2, C4);</li> <li>• independent research for empirical dissertation (C2 – C3);</li> <li>• group project ( C4).</li> </ul> <p>Assessment strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> <li>• Practical assignments (C1- C4);</li> </ul>
<p><b>D: Transferable skills</b></p> <p>This Level provides opportunities for students to:</p>	<p>The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the programme learning outcomes:</p>
<p><b>D1</b> plan,organise and produce a project to a given time-scale;</p> <p><b>D2</b> work effectively as a member of a team communicating with peers, supervisors and others;</p> <p><b>D3</b> apply personally motivated research, independent learning and problem solving abilities required for continuing professional developm;</p> <p><b>D4</b> demonstrate the application of engineering principles to solve technical problems in a chosen field;</p>	<p>Learning and teaching strategies and methods:</p> <ul style="list-style-type: none"> <li>• lectures (D1 – D4);</li> <li>• seminars (D1- D4);</li> <li>• use of the VLE (D1 – D4);</li> <li>• directed reading (D1- D4).</li> </ul> <p>Assessment strategies and methods:</p> <ul style="list-style-type: none"> <li>• practical assignments (D1 – D4)</li> </ul>

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### ADMISSION REGULATIONS

The regulations for this programme are the University's Standard Postgraduate Admission Regulations <https://intranetsp.bournemouth.ac.uk/pandptest/3a-postgraduate-admissions-regulations.pdf>

with the following exceptions: Applicants whose mother tongue is not English must offer evidence of qualifications in written and spoken English. Acceptable qualifications are: IELTS (academic) 6.5 (with a minimum of 6 in each of four categories) or direct equivalent. A portfolio of suitable programming and animation / technical materials including a final dissertation will be required.

### PROGRESSION ROUTES

Articulation & Internal Progression

Recognition arrangements provide formally approved entry or progression routes through which students are eligible to apply for a place on a programme leading to a BU award. Recognition does not guarantee entry onto the BU receiving programme only eligibility to apply. In some cases, additional entry criteria such as a Merit classification from the feeder programme may also apply. Please see the recognition register for a full list of approved Recognition arrangements and agreed entry criteria.

### ASSESSMENT REGULATIONS

The regulations for this programme are the University's Standard Postgraduate Assessment Regulations.

<https://intranetsp.bournemouth.ac.uk/pandptest/6a-standard-assessment-regulations-postgraduate.pdf>

### WORK BASED LEARNING (WEL) AND PLACEMENT ELEMENTS

The placement is option during the master project in the semester 3 with duration up to 3 month. It is the student's responsibility for arranging the placement, and it will need to be discussed with and approved by the course / unit leader

## Programme Skills Matrix

Units		A 1	A 2	A 3	A 4	A 5	B 1	B 2	B 3	B 4	C 1	C 2	C 3	C 4	D 1	D 2	D 3	D 4	
LEVEL 7	<b>Animation Software Engineering</b>		*		*	*			*	*	*	*	*		*		*	*	
	<b>CGI Tools</b>	*		*			*	*	*			*	*	*	*		*		
	<b>CGI Techniques</b>	*	*	*	*				*	*	*				*		*	*	
	<b>Simulation and Rendering</b>		*	*	*		*		*	*	*			*	*		*	*	
	<b>Pipeline and Technical Direction</b>		*	*		*	*		*	*	*	*	*	*	*	*	*	*	
	<b>Group Project</b>	*				*	*		*			*	*		*	*	*		
	<b>MSc Project and Thesis</b>	*	*	*	*		*	*	*	*	*	*		*	*	*	*	*	
<p><b>A – Subject Knowledge and Understanding</b>            This programme provides opportunities for students to develop and demonstrate knowledge and understanding of:</p> <ol style="list-style-type: none"> <li>the languages used to discuss the moving image and art, science and technology;</li> <li>the fundamentals of computer graphics;</li> <li>the techniques applicable to their own practice;</li> <li>Mathematics and algorithms for computer graphics;</li> <li>Software development and engineering techniques for technical direction and the CGI pipeline</li> </ol>							<p><b>C – Subject-specific/Practical Skills</b>            This programme provides opportunities for students to:</p> <ol style="list-style-type: none"> <li>become expert in the use of software and tools appropriate to their discipline;</li> <li>demonstrate a mastery of computer programming languages and application programming interfaces for CGI production;</li> <li>identify and apply the correct techniques for CGI production and pipelines either individually or as a group;</li> <li>To communicate effectively with artists in the development and application of animation tools and techniques;</li> </ol>												
<p><b>B – Intellectual Skills</b>            This programme provides opportunities for students to:</p> <ol style="list-style-type: none"> <li>develop critical analysis of work in the field of moving image;</li> <li>contextualize personal practice critically, technically and historically;</li> <li>select and evaluate the correct techniques / tools for the production of an asset / project</li> </ol> autonomously identify and solve CGI problems by the application of software techniques and the synthesis of current research.							<p><b>D – Transferable Skills</b>            This programme provides opportunities for students to:</p> <ol style="list-style-type: none"> <li>plan,organise and produce a project to a given time-scale;</li> <li>work effectively as a member of a team communicating with peers, supervisors and others;</li> <li>apply personally motivated research, independent learning and problem solving abilities required for continuing professional developm;</li> </ol> demonstrate the application of engineering principles to solve technical problems in a chosen field;												

