

KEY PROGRAMME INFORMATION

Originating institution(s) Bournemouth & Poole College	Faculty responsible for the programme Faculty of Science and Technology
Final award(s), title(s) and credits FdSc 3D Computer Generated Imagery – 120 (60 ECTS) Level 4 / 120 (60 ECTS) Level 5 credits	
Intermediate award(s), title(s) and credits Certificate of Higher Education (CertHE) 3D Computer Generated Imagery (requires 120 credits; 60 ECTS credits)	
UCAS Programme Code(s) (where applicable and if known) G453	HECoS Code(s) and percentage split per programme/pathway 100363 Computer Animation & Visual Effects (50%) 101019 Computer games graphics (25%) 100057 Animation (25%)
External reference points <ul style="list-style-type: none"> • The Revised UK Quality Code for Higher Education; • Expectations: The academic standards of courses meet the requirements of the relevant national qualifications framework • QAA Subject Benchmark Statements (3rd May 2018): Quality Assurance Agency (QAA) on behalf of the UK Standing Committee for Quality Assessment (UKSCQA)in consultation with the higher education (HE) sector; as there are no subject benchmarks specifically for CGI related degrees, subject benchmarks for Communication, Media, Film and Cultural Studies (2019) and Computing (2019) have informed the programme design. • Practices: Core & Common. Underpinning the Delivery of Expectations • Although PSRB approval is not being sought as part of this review, the programme design has also been informed by the ScreenSkills competency-based framework. 	
Professional, Statutory and Regulatory Body (PSRB) links None	
Places of delivery Bournemouth & Poole College	
Mode(s) of delivery Full-time	Language of delivery English
Typical duration 2 Years Full time	
Date of first intake September 2021	Expected start dates September
Maximum student numbers Not Applicable	Placements Not Applicable
Partner(s) Bournemouth and Poole College	Partnership model Validation
Date of this Programme Specification August 2020	
Version number 1.0-0923	
Evaluation and modification reference numbers E192027, approved 14/10/2020	
Author K French	

Programme Specification – Section 1

PROGRAMME STRUCTURE

Programme Award and Title: FdSc 3D Computer Generated Imagery

Year 1/Level 4

Students are required to complete all 6 core units

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			
Modelling and Materials	Core	20	-	40%	60%	90	1.0	101019 (100%)
3D Animation	Core	20	-	100%	-	90	1.0	100057 (100%)
Lighting and Rendering	Core	20	-	100%	-	90	1.0	101019 (100%)
Production Editing & Sound	Core	20	-	100%	-	90	1.0	100363 (100%)
Graphical Communications	Core	20	-	40%	60%	90	1.0	100632 (100%)
Project 1	Core	20	-	100%	-	90	1.0	100363 (100%)

Progression requirements: Requires 120 credits at Level 4

Exit qualification: CertHE 3D Computer Generated Imagery (requires 120 credits at Level 4)

Year 2/Level 5

Students are required to complete all 4 core units + 1 Optional unit

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			
Project 2	Core	40	-	40%	60%	180	1.0	100363 (100%)
Post-Production & VFX	Core	20	-	60%	40%	90	1.0	100717 (100%)
Asset Design & Texturing	Core	20	-	50%	50%	90	1.0	100363 (100%)
Lighting, Cameras & Rendering	Core	20	-	60%	40%	90	1.0	101214 (60%) 100063 (40%)
Architectural Visualisation Techniques 1	Option	20	-	40%	60%	90	1.0	100632 (60%) 101019 (40%)
Performance & Technical Animation 1	Option	20	-	60%	40%	90	1.0	100057 (100%)

Exit qualification: FdSc 3D Computer Generated Imagery (requires 120 credits at Level 4 and 120 credits at Level 5)

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 programme aims to develop industry-ready Foundation Degree-level graduates, who:

- Have the subject-specific and transferrable skills needed to enter junior or intern roles in any CGI related field
- Show a solid understanding of the principles of CGI
- Apply CGI principles in their own professional practice
- Can work autonomously or in teams when directed by creative and technical specialists
- Are able to explain their work clearly verbally and graphically
- Can work under the pressure of a deadline
- Demonstrate an understanding of creative intent and follow a brief related to the production of a CGI deliverable
- Can produce work to the level expected by industry from intern / junior level artists

Industry requirements for intern / junior positions involve a blend of technical understanding and application, creative potential and strong work ethic. To address this need, this programme approaches the field of CGI from a practical stance with underpinning theories and principles embedded throughout.

A strong work ethic is encouraged through significant amounts of practical coursework (some with tight deadlines), group discussion, peer critique and regular input from industry partners to paint an accurate picture of the expectations in industry.

As well as the technical understanding and practical skills, students will be taken on a creative journey by analysis of existing CGI art (films, games, images etc.) and other media while increasing their own graphical / artistic skills to aid them in communicating in the various creative fields they will encounter in industry.

Students' comprehension and knowledge of CGI principles will be assessed primarily on their CGI production methods and end deliverables to mirror the way industry assesses job applicants. Additionally, core knowledge and understanding will be assessed through essays and presentations to ensure academic rigour.

The CGI paradigm is not only an academic approach that engages all students at every level but that all staff participate in a holistic and pastoral capacity.

ALIGNMENT WITH THE UNIVERSITY'S STRATEGIC PLAN

The CGI programmes have a strong link to industry with many companies counted as our key industry partners. Our Industry Partners are heavily involved in the course, providing some of the assignment briefs, feedback on presentation panels and guest lectures as well as being influential in the design and continual development of the course content.

In the past and to the future when opportunities arrive, these programmes have adopted live industry projects into coursework, working closely alongside industry clients to provide students with the closest industry experience they can get.

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.

Assessment per 20 credit unit should normally consist of 3,000 words or equivalent. Dissertations and Level 6 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.

Within project units, the assessment activity will necessarily be a larger percentage of the overall study time as the project units relate to practical application of material already learned in other units. The assessable activity of a project unit would normally be around 75% of the total learning time for the unit. This recognises the implicit learning process the student undergoes when doing a practical task is a significant contribution to the overall learning within the unit.

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.

Despite approaching this course from a practical stance, the majority of units will be delivered by academic staff as the theories and principles are embedded within practical examples. Within project units, a variety of teaching staff, including academic staff, professional practitioners and demonstrators are used as this creates the widest view of professional practice within the unit. Project unit leaders / assessors will always be academics.

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

LEVEL 5/FdSc: INTENDED LEVEL OUTCOMES

<p>A: Subject knowledge and understanding</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>A1 A variety of advanced 3D modelling techniques;</p> <p>A2 Multi-channel material creation and mapping;</p> <p>A3 Animation performance and principles;</p> <p>A4 The key principles of character rigging;</p>	<p>Learning and teaching strategies and methods:</p> <ul style="list-style-type: none"> • Lectures (A1-A11); • Practical workshops (A1-A5, A10-A11); • Seminars (A4, A6-A9); • Theory workshops (A7-A10);

Programme Specification - Section 2

<p>A5 The treatment of rendered data post-production for compositing and editing;</p> <p>A6 Different approaches to rendering;</p> <p>A7 Filmic styles, lighting and colour;</p> <p>A8 Poses, body language and expression;</p> <p>A9 Aesthetic and functional appreciation of architecture;</p> <p>A10 Architectural modelling techniques and interoperability;</p> <p>A11 Foley sound, rotoscoping, tracking & stabilisation.</p>	<ul style="list-style-type: none"> • Tutorials (A4, A7-A9). <p>Assessment strategies and methods:</p> <ul style="list-style-type: none"> • Practical coursework (A1-A11); • Project work (A1-A11); • Seminar (A6, A11); • Timed practical (A3, A9, A11).
<p>B: Intellectual skills</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>B1 Demonstrate a methodical approach to problem solving;</p> <p>B2 Analyse and synthesise information from different CGI techniques;</p> <p>B3 Evaluate various methodologies and/or technologies;</p> <p>B4 Synthesise different styles to explore their own work in a stylistic context;</p> <p>B5 Fuse creative, technical and functional requirements in the production of CGI assets and/or deliverables;</p> <p>B6 Critically evaluate their own work.</p>	<p>Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • Lectures (B1-B6); • Seminars (B3-B6); • Tutorials (B1-B6). <p>Assessment Strategies And Methods (Referring To Numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • Project Dissertation (B1-B6); • Practical coursework (B4-B5); • Presentations (B1-B6).
<p>C: Practical skills</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>C1 Follow recognised CGI pipelines in the production of a deliverable;</p> <p>C2 Create professional quality animatable 3D models using appropriate techniques;</p> <p>C3 Create and apply complex materials to 3D models;</p> <p>C4 Create 3D performance-based animations;</p> <p>C5 Create animations using different industry-relevant pipelines;</p> <p>C6 Create a reasonably advanced character rig;</p> <p>C7 Optimise lighting and render settings for different scenes;</p> <p>C8 Enhance renders using post-production software;</p>	<p>Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • Practical workshops (C1-C8, C10-C12); • Theory Workshops (C1, C9); • Tutorials (C1-C11). <p>Assessment strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • Project (C1-C5, C7-C12); • Practical coursework (C1-C12); • Timed Practical (C5, C10-12).

Programme Specification - Section 2

<p>C9 Develop their own artistic ability in different media for storyboards and concept art;</p> <p>C10 Create photorealistic architectural images;</p> <p>C11 Import, clean and modify models from CAD data;</p> <p>C12 Composite HDRI and SFX into footage.</p>	
<p>D: Transferable skills</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>D1 Create a brief and a project plan within a given scope;</p> <p>D2 Work to a brief and evaluate the product against the brief;</p> <p>D3 Present work to a panel of experts and manage feedback;</p> <p>D4 Communicate academic, technical and creative ideas verbally, graphically and with the written word;</p> <p>D5 Manage their own time when working on a variety of tasks simultaneously;</p> <p>D6 Implement a strategy for self-promotion with a portfolio of work.</p>	<p>Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • Lectures (D1-D6); • Practical workshops (D4); • Seminars (D3-D4, D6); • Tutorials (D1-D2, D5-D6). <p>Assessment strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • Project (D1-D6); • Practical coursework (D2, D4-D5); • Presentations (D3-D4).

LEVEL 4/Cert HE: INTENDED LEVEL OUTCOMES

<p>A: Subject knowledge and understanding</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>A1 A variety of 3D modelling techniques;</p> <p>A2 Basic material creation and material mapping;</p> <p>A3 Animation methods applicable to different model types;</p> <p>A4 The principles of animation;</p> <p>A5 Standard CGI lighting schemes;</p> <p>A6 Fundamental rendering concepts;</p> <p>A7 The use of graphical methods for communication in CGI;</p> <p>A8 Video and sound editing;</p> <p>A9 Basic Compositing.</p>	<p>Learning and teaching strategies and methods:</p> <ul style="list-style-type: none"> • Lectures (A1-A9); • Practical workshops (A1-A3, A5, A8-A9); • Seminars (A4, A6-A7); • Art workshops (A7); • Tutorials (A1-A9). <p>Assessment strategies and methods:</p> <ul style="list-style-type: none"> • Practical coursework (A1-A9); • Project work (A1-A9); • Essay (A1-A9).

Programme Specification - Section 2

<p>B: Intellectual skills</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>B1 Apply methods and theories taught to new scenarios;</p> <p>B2 Demonstrate understanding and application of suitable methodologies to a project;</p> <p>B3 Consolidate their own learning through the production of a deliverable;</p> <p>B4 Work in a way that considers future manipulation of their work;</p> <p>B5 Develop a critical awareness of CGI requirements for different contexts.</p>	<p>Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • Lectures (B1-B5); • Seminars (B2, B4-B5); • Tutorials (B1-B5); • Practical workshops (B1-B4). <p>Assessment Strategies And Methods (Referring To Numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • Project Dissertation (B1-B5); • Practical coursework (B1-B5).
<p>C: Practical skills</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>C1 Complete a project in CGI under guidance;</p> <p>C2 Create 3D models from 2D graphical sources;</p> <p>C3 Create and apply basic materials to 3D models;</p> <p>C4 Create 3D animations based on animation principles;</p> <p>C5 Create a variety of CGI lighting schemes;</p> <p>C6 Render CGI scenes;</p> <p>C7 Use sketches for concept development;</p> <p>C8 Create storyboards to inform future projects.</p>	<p>Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • Practical workshops (C1-C6); • Art workshops (C7-C8); • Tutorials (C1-C8). <p>Assessment strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • Project (C1-C8); • Practical coursework (C2-C6); • Art workshops (C7-C8).
<p>D: Transferable skills</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>D1 Employ suitable methodologies in the execution of a project;</p> <p>D2 Work to a brief within a suitable CGI project;</p> <p>D3 Communicate verbally, graphically and with the written word;</p> <p>D4 Demonstrate time-management within a CGI project.</p>	<p>Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • Lectures (D1-D4); • Practical workshops (D1-D3); • Seminars (D3-D4); • Tutorials (D1-D4). <p>Assessment strategies and methods (referring to numbered Intended Learning Outcomes):</p>

Programme Specification - Section 2

	<ul style="list-style-type: none">• Project (D1-D4);• Practical coursework (D1-D4).
--	--

ADMISSION REGULATIONS

The regulations for this programme are the University's Standard Undergraduate Admission Regulations

The University's standard Admission Regulations are available within section 3.1 of the *ARPP* on the BU website by following this link:

<https://intranetsp.bournemouth.ac.uk/pandptest/3a-undergraduate-admissions-regulations.doc>

PROGRESSION ROUTES

Students achieving a Merit on the FdSc 3D Computer Generated Imagery are eligible for entry onto: BSc (top-up) 3D Computer Generated Imagery

In the event that a student does not achieve a Merit, progression routes are also available by portfolio at the discretion of the BSc Programme Leader.

In order to take advantage of exciting new approaches to learning and teaching, as well as developments in industry, the current, approved progression routes for this programme may be subject to change. Where this happens students will be informed and supported by the College as early as possible.

ASSESSMENT REGULATIONS

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

The University's Standard Assessment Regulations are available within section 6.1 of the *ARPP* on the BU website by following this link:

<https://intranetsp.bournemouth.ac.uk/Documents/arpp61.aspx>

WORK BASED LEARNING (WBL) AND PLACEMENT ELEMENTS

There is no placement on the Foundation Degree.

For Work-Based Learning, the FdSc final-year curriculum content incorporates relevant preparatory theory giving the learner a degree of expectancy towards progressing to the BSc top-up.

This is achieved through a high level of industry involvement with the FdSc. The involvement can take many forms such as being part of an assessment panel for the learner's project presentations and offering relevant critique. It can take the form of a real world assignment brief, one of many guest lectures or site visits to studios or film sets. It can also take the form of job opportunities being offered at the end-of-year Graduate Expo.

The structure of the FdSc Major Project mimics the pressures and deadlines of an industry assignment and, as such, is constantly being updated to reflect current working practices. Within the Performance & Technical Animation / Architectural Visualisation Techniques units, there is also a timed practical to put students in a simulated deadline situation.

Programme Skills Matrix

Units		Programme Intended Learning Outcomes																																			
		A 1	A 2	A 3	A 4	A 5	A 6	A 7	A 8	A 9	A 10	A 11	B 1	B 2	B 3	B 4	B 5	B 6	C 1	C 2	C 3	C 4	C 5	C 6	C 7	C 8	C 9	C 10	C 11	C 12	D 1	D 2	D 3	D 4	D 5	D 6	
L 5	Project 2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Post-Production & VFX					X		X				X	X	X		X	X	X	X						X	X				X			X				
	Asset Design & Texturing	X	X								X		X		X		X			X	X																
	Lighting, Cameras & Rendering					X	X	X					X				X	X								X						X				X	
	Architectural Visualisation Techniques 1									X	X		X	X	X	X		X									X	X	X					X		X	
	Performance & Technical Animation 1			X	X				X				X	X	X	X		X			X	X	X				X								X		X
L 4	Project 1		X				X		X			X	X	X		X	X	X	X					X	X					X	X	X	X	X	X		
	Modelling and Materials	X	X							X				X		X		X	X	X											X		X				
	3D Animation			X										X					X			X									X		X				
	Lighting and Rendering					X	X	X						X					X						X	X					X		X				
	Graphical Communications						X	X							X	X			X								X				X		X				
Production Editing & Sound					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 of:

1. A variety of advanced 3D modelling techniques;
2. Multi-channel material creation and mapping;
3. Animation performance and principles;
4. The key principles of character rigging;
5. The treatment of rendered data post-production for compositing and editing;
6. Different approaches to rendering;
7. Filmic styles, lighting and colour;
8. Poses, body language and expression;

C – Subject-specific/Practical Skills

This programme provides opportunities for students to:

1. Follow recognised CGI pipelines in the production of a deliverable;
2. Create professional quality animatable 3D models using appropriate techniques;
3. Create and apply complex materials to 3D models;
4. Create 3D performance-based animations;
5. Create animations using different industry-relevant pipelines;
6. Create a reasonably advanced character rig;
7. Optimise lighting and render settings for different scenes;
8. Enhance renders using post-production software;
9. Develop their own artistic ability in different media for storyboards and concept art;

<ul style="list-style-type: none"> 9. Aesthetic and functional appreciation of architecture; 10. Architectural modelling techniques and interoperability; 11. Foley sound, rotoscoping, tracking & stabilisation. 	<ul style="list-style-type: none"> 10. Create photorealistic architectural images; 11. Import, clean and modify models from CAD data; 12. Composite HDRI and SFX into footage.
<p>B - Intellectual Skills This programme provides opportunities for students to:</p> <ul style="list-style-type: none"> 1. Demonstrate a methodical approach to problem solving; 2. Analyse and synthesise information from different CGI techniques; 3. Evaluate various methodologies and/or technologies; 4. Synthesise different styles to explore their own work in a stylistic context; 5. Fuse creative, technical and functional requirements in the production of CGI assets and/or deliverables; 6. Critically evaluate their own work. 	<p>D - Transferable Skills This programme provides opportunities for students to:</p> <ul style="list-style-type: none"> 1. Create a brief and a project plan within a given scope; 2. Work to a brief and evaluate the product against the brief; 3. Present work to a panel of experts and manage feedback; 4. Communicate academic, technical and creative ideas verbally, graphically and with the written word; 5. Manage their own time when working on a variety of tasks simultaneously; 6. Implement a strategy for self-promotion with a portfolio of work.