Course Specification

Course Summary Information				
1	**Course Title**		BSc (Hons) Visual Effects	
2	**BCU Course Code**	**UCAS Code**	US0946	1018
3	**Awarding Institution**		Birmingham City University	
4	**Teaching Institution(s)** (if different from point 3)			
5	**Professional Statutory or Regulatory Body (PSRB) accreditation** (if applicable)			

6	**Course Description**
	So you want to work in the Film or Games industry? Do you imagine yourself as a creative artist or a technical director? Our BSc (Hons) degree in Visual Effects is where creativity meets technology. It will give you the skills to unleash your true mix of creative and technical abilities. You could go on to work on top level productions for a range of industries, including TV, film, games, advertising, architecture, education and more. Visual Effects is an ever expanding multi-billion-pound industry in the UK and globally, with job opportunities in high demand. As demand grows for visual effects in Film, TV and Games, the demand also grows for skilled professionals who can bring these to life. On this course, you will develop technical, creative and production skills to prepare you for a range of careers. You will learn a variety of disciplines from modelling, rigging, animation, dynamics to lighting, rendering and compositing, there is so much for you to explore. You will learn using state-of-the-art facilities and software including a Vicon Motion Capture studio, high-specification computers, industry standard software such as Maya, Nuke and Houdini and one of the largest fixed green screen studios in the UK. You will be taught by a range of experienced staff, with a breadth of knowledge across both visual effects and the larger area of computer graphics. This includes staff with industry experience, and staff who work and innovate alongside industry in a variety of ways. **What's covered in the course?** This course has been developed alongside the visual effects industry to meet the needs of employers, so that you leave with the skills needed to secure a great career. You will learn all aspects of visual effects production including shooting video, computer modelling, animation, matchmoving, motion capture and compositing. You will use these skills to produce digital elements such as creatures and environments, then combine them with live action video to produce convincing visual effects shots. Along with the visual elements you produce, you will develop problem solving and critical thinking skills while building your unique fusion of creative and technical abilities that are desired by industry. As a Bachelor of Science (BSc) course there is an emphasis on Technical Director (TD) roles such as: Matchmoving, Rigging, Dynamic Simulations, Motion Capture and Python/Pipeline

	Development, which are in particular demand within the visual effects industry. You will learn technical skills underpinned by knowledge of fundamental concepts while using industry tools and best practice. During the course, you will do a mixture of 'hands on' productions and technical investigations, which will teach you the practice, process, craft and technology of visual effects. These activities will help you become a proactive learner able to explore knowledge, implement best practice and critically evaluate the results of your work. Aligning with the industry practice of collaboration, you will get the opportunity to work with students from related disciplines such as games and film. This will allow you to broaden your horizons and help you understand how your visual effects and computer graphics skills can fit into other existing and emerging industries.

7	**Course Awards**		
7a	**Name of Final Award**	**Level**	**Credits Awarded**
	Bachelor of Science with Honours Visual Effects Bachelor of Science with Honours Visual Effects with Professional Placement Year	6 6	360 480
7b	**Exit Awards and Credits Awarded**		
	Certificate of Higher Education Visual Effects Diploma of Higher Education Visual Effects Bachelor of Science Visual Effects	4 5 6	120 240 300

8	**Derogation from the University Regulations**
	Not applicable.

9	**Delivery Patterns**		
Mode(s) of Study	**Location(s) of Study**	**Duration of Study**	**Code(s)**
Full Time	City Centre	3 years	US0946
with Professional Placement Year	City Centre	4 years	US1108

10	**Entry Requirements**	
	Home:	GCSE at Grade 4 (C) or above in English Language and Mathematics. Equivalent qualifications will be accepted. BBB or 120 UCAS tariff points. It is beneficial that at least one A level or diploma is from a technology, mathematics, science or computing related subject. Other qualifications and subject mixes will be considered.
	EU:	IELTS 6.0 overall with 5.5 minimum in all bands
	International:	IELTS 6.0 overall with 5.5 minimum in all bands
	Access:	60 credits overall. Minimum of 45 credits at level 3. The remaining 15 credits can be taken either at level 2 or 3. Must be from Technology, Science, or Computing related subjects. A minimum of 12 credits achieved from any Technology Units awarded at Merit or Distinction.

11	**Course Learning Outcomes**
	Knowledge and Understanding
KU1	Explain and interpret key principles and concepts underpinning visual effects production workflows and tools, relating them to visual effects disciplines.
KU2	Relate key concepts and theories around physics, movement, geometry and image manipulation to the production of visual effects and computer graphics.
KU3	Discuss tools, techniques and approaches relating to technical aspects visual effects production such as: matchmoving; dynamic simulations and rigging, in a knowledgeable and informed manner.
KU4	Relate management, organisational and business theories to the process of producing visual effects and wider career development.
	Cognitive and Intellectual Skills
IS1	Design and implement bespoke approaches and solutions, to producing film visual effects.
IS2	Assimilate, interpret and analyse information from a wide variety of research sources, constructing effective arguments and expressing justified conclusions.
IS3	Analyse and deconstruct a visual effects shot breaking it down into logical components.
IS4	Be able to critically evaluate and reflect on their own work and the methods used, then independently develop their knowledge and skills in response.
	Practical and Professional Skills
PS1	Use industry standard approaches to planning and organising productions such as: group/collaborative work; regular production meetings; implementing and working within production workflows or pipelines and taking iterative or progressive approaches to production development.
PS2	Utilise a range of industry standard tools along with a fusion of creative and technical skills to produce 3D models, film visual effects and computer animations, incorporating realistic movement, lighting and textures.
PS3	Utilise testing methodologies to objectively measure and compare production approaches and their output.
PS4	Effectively and safely use of a variety of hardware and software tools, in a highly competent and ethical manner.
	Key Transferable Skills
TS1	Demonstrate and use technical, research, analytical, planning, design and organisational skills, which are highly transferable and can be used in a wide variety of disciplines.
TS2	In co-operation with others, plan and undertake tasks and work effectively in a multi-disciplinary team of creative, technical and organizational production roles.
TS3	Communicate effectively in writing and presentations to specialist and non-specialist audiences.
TS4	Relate visual effects production skills to practices and tools in variety of media/industries.

12	Course Requirements

12a Level 4:

In order to complete this course a student must successfully complete all the following CORE modules (totalling 120 credits):

Module Code	Module Name	Credit Value
DIG4172	Modelling	20
CMP4264	2D Game Programming	20
DIG4149	Acquisition for Visual Effects	20
DIG4174	Texture and Look Development	20
DIG4175	Animation	20
DIG4171	Matchmoving	20

Level 5:

In order to complete this course a student must successfully complete all the following CORE modules (totalling 120 credits):

Module Code	Module Name	Credit Value
DIG5136	Rigging for Animation	20
DIG5123	Visual Effects Tools	20
DIG5132	Compositing	20
DIG5133	Dynamic Effects and Simulations	20
DIG5129	Research and Testing Methods	20
DIG5116	Collaborative Practice	20

Professional Placement Year (optional)

In order to qualify for the award of Bachelor of Science with Honours Visual Effects with Professional Placement Year, a student must successfully complete all of the Level 6 modules listed below as well as the following Level 5 module:

Module Code	Module Name	Credit Value
PPY5004	Professional Placement	120

Level 6:

In order to complete this course a student must successfully complete all the following CORE modules (totalling 120 credits):

Module Code	Module Name	Credit Value
DIG6114	Production Project	40
DIG6200	Individual Honours Project	40
DIG6208	Virtual Production	20
DIG6207	Professional Futures	20

12b Structure Diagram

<table>
<tr><th>Semester</th><th colspan="3">Level 4 - Year 1</th></tr>
<tr><td>1</td><td>Modelling

20 Credits</td><td>2D Game Programming

20 Credits</td><td>Acquisition for Visual Effects

20 Credits</td></tr>
<tr><td>2</td><td>Texture and Look Development

20 Credits</td><td>Animation

20 Credits</td><td>Matchmoving

20 Credits</td></tr>
<tr><td colspan="4">Level 5 – Year 2</td></tr>
<tr><td>1</td><td>Rigging for Animation

20 Credits</td><td>Dynamics Effects and Simulations

20 Credits</td><td>Compositing

20 Credits</td></tr>
<tr><td>2</td><td>Visual Effects Tools

20 Credits</td><td>Research and Testing Methods

20 Credits</td><td>Collaborative Practice

20 Credits</td></tr>
<tr><td colspan="4">Professional Placement – Year 3 (optional)

Professional Placement module 120 credits</td></tr>
<tr><td colspan="4">Level 6 – Year 4</td></tr>
<tr><td>1</td><td colspan="2">Production Project

40 Credits</td><td rowspan="2">Individual Honours Project

40 Credits</td></tr>
<tr><td>2</td><td>Virtual Production

20 Credits</td><td>Professional Futures

20 Credits</td></tr>
</table>

13 Overall Student Workload and Balance of Assessment

Overall student *workload* consists of class contact hours, independent learning and assessment activity, with each credit taken equating to a total study time of around 10 hours. While actual contact hours may depend on the optional modules selected, the following information gives an indication of how much time students will need to allocate to different activities at each level of the course.

- *Scheduled Learning* includes lectures, practical classes and workshops, contact time specified in timetable
- *Directed Learning* includes placements, work-based learning, external visits, on-line activity, Graduate+, peer learning
- *Private Study* includes preparation for exams

The *balance of assessment* by mode of assessment (e.g. coursework, exam and in-person) depends to some extent on the optional modules chosen by students. The approximate percentage of the course assessed by coursework, exam and in-person is shown below.

Level 4

Workload

24% time spent in timetabled teaching and learning activity

Activity	Number of Hours
Scheduled Learning	288 (Classes) + 26 Hours (Tutoring) = 314
Directed Learning	318
Private Study	594
Total Hours	1226

Balance of Assessment

Assessment Mode	Percentage
Coursework	100%
Exam	0%
In-Person	0%

Level 5

Workload

24% time spent in timetabled teaching and learning activity

Activity	Number of Hours
Scheduled Learning	288 (Classes) + 26 Hours (Tutoring) = 314
Directed Learning	296
Private Study	616
Total Hours	1226

Balance of Assessment

Assessment Mode	Percentage
Coursework	100%
Exam	0%
In-Person	0%

Level 6

Workload

20% time spent in timetabled teaching and learning activity

Activity	Number of Hours
Scheduled Learning	222 (Classes) + 26 Hours (Tutoring) = 248
Directed Learning	228
Private Study	750
Total Hours	1226

Balance of Assessment

Assessment Mode	Percentage
Coursework	75%
Exam	0%
In-Person	25%