

# **Course Specification**

Cou	Course Summary Information		
1	Course Title	BSc (Hons) Visua	I Effects with Foundation Year
2	BCU Course Code UCAS Code	US0946F	1019
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	6	480
	Bachelor of Science with Honours Visual Effects with 6 600		600
	Professional Placement Year		
7b	Exit Awards and Credits Awarded		
	Foundation Visual Effects 3 120		
	Certificate of Higher Education Visual Effects 4 240		240
	Diploma of Higher Education Visual Effects 5 360		360
	Bachelor of Science Visual Effects	6	420

8	Derogation from the University Regulations
	Not applicable.

9 Delivery Patterns			
Mode(s) of Study	Location(s) of	Duration of Study	Code(s)
	Study		
Full Time	City Centre	4 years	US0946F
With Professional Placement	City Centre	5 years	US1108
Year			



10	Entry Requirements
	The admission requirements for this course are stated on the course page of the BCU website at <u>https://www.bcu.ac.uk/</u> or may be found by searching for the course entry profile located on the UCAS website.

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,
100	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,
TOO	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
TOO	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 3:

# To complete this course, you must successfully complete all the following CORE modules (totalling 120 credits):

Module Code	Module Name	Credit Value
CMP3010	Fundamental Mathematics	20
CMP3014	Fundamentals of Digital Technology	20
CMP3012	Web Application Design	20
CMP3013	Audio / Video Fundamentals	20
BNV3002	Independent Practice	20
CMP3009	Foundations of Programming	20

#### Level 4:

# To complete this course, you 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:

To complete this course, you 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)**

To qualify for the award of Bachelor of Science with Honours Visual Effects with Foundation Year and Professional Placement Year, you must successfully complete all the modules listed as well as the following Level 5 module:

Module Code	Module Name	Credit Value
PPY5004	Professional Placement	120

Level 6:

To complete this course, you 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

Semester		Year 1- Level 3	
1	Fundamental Mathematics 20 Credits	Fundamentals of Digital Technology 20 Credits	Web Application Design 20 Credits
2	Audio / Video Fundamentals 20 Credits	Independent Practice 20 Credits	Foundations of Programming 20 Credits
	·	Year 2- Level 4	
1	Modelling	2D Game Programming	Acquisition for Visual Effects
	20 Credits	20 Credits	20 Credits
2	Texture and Look Development	Animation	Matchmoving
2	20 Credits	20 Credits	20 Credits
	Y	ear 3 - Level 5	
1	Rigging for Animation	Visual Effects Tools	Compositing
•	20 Credits	20 Credits	20 Credits
2	Dynamics Effects and Simulations	Research and Testing Methods	Collaborative Practice
	20 Credits	20 Credits	20 Credits
	Professional F	Placement Year 4 (optional	)
	Professional PI	acement Module 120 Credi	ts
	Y	′ear 5 - Level 6	
	Production Project		
1	1 40 Credits		Individual Honours Project
2	Virtual Production	Professional Futures	40 Credits
	20 Credits	20 Credits	



#### 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 3

# **Workload**

# 32% time spent in timetabled teaching and learning activity

Activity	Number of Hours
Scheduled Learning	384
Directed Learning	416
Private Study	400
Total Hours	1200

# **Balance of Assessment**

Assessment Mode	Percentage
Coursework	78%
Exam	0
In-Person	22%

#### 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%