

# UNDERGRADUATE PROGRAMME SPECIFICATION

Programme Title:	FX Awards
Awarding Body:	Staffordshire University
Teaching Institution:	Staffordshire University
	Asia Pacific Institute of Information Technology
Final Awards:	BSc (Hons) Digital Film and 3D Animation Technology
Intermediate Awards:	Cert HE, DipHE,
Mode of Study	Full time / Part time
UCAS Codes:	G450
JCAS Codes:	J900
QAA Subject Benchmarks:	Engineering
Professional/Statutory Body:	None
Date of Production:	March 2013
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# EDUCATIONAL AIMS OF THE PROGRAMME

The FX group aim is to bestow graduates with an extensive knowledge of the principles, practice of technology and academic study in the field of visual effects (VFX) and games concept design.

The awards have been developed to offer exciting learning pathways for students wishing to work in the film, television, visual effects and games industries.

The FX scheme consists of a number of awards that can be studied on a full time or part time basis. All named awards lead to a Bachelor of Science with honours (BSc Hons).

The awards will provide students with transferable skills for use in a range of media based industries. The curricula are designed to incorporate a high level of hands on technical and creative work with a substantial level of academic theory..

### BSc (Hons) Digital Film and 3D Animation Technology

The aim is to offer a generalist visual effects award with more choice as to the direction of study.

We aim to produce graduates who will be skilled in the specific area of technical expertise in digital animation, 3D modelling, lighting, rendering, matchmoving and digital filmmaking plus offering a number of options in either film, TV, games and concept art.

To achieve this aim we have a number of objectives to forfill. The students will:

- Develop an advanced understanding and practise of 3D graphics technologies.
- Acquire practical and academic skills in digital film production
- Learn advanced skills in 2D and 3D digital compositing
- Learn an in-depth understanding of the science and technology of the field of work.

## What is distinctive about this programme?

The distinctions of this award are:

- Strong industry links with leading visual effects companies.
- Industry set briefs
- Access to professional media content supplied form professional production companies
- Developed directly from Skillset and Industry colleagues
- Prepares students for graduate
- Guest lecturers from industry
- Offers many employability opportunities to prepare you for the outside world
- 81% of students gain graduate jobs (KIS 2013) within 6 months.

## The Staffordshire Graduate

The Staffordshire Graduate represents a set of attributes that the University passionately believes is necessary for success in the 21st century. The Staffordshire Graduate develops students into becoming reflective and critical life long learners with a global perspective, prepared to contribute in the world of work.

The FX Awards at Staffordshire University produce rounded, articulate and highly employable graduates.

The FX awards are designed to ensure our graduates are work ready, employable and entrepreneurial. The first year of study integrates the Staffordshire Graduate attributes into its modules (see the appendix for the benchmark statement). Year 2 and 3 have a 30 credit module, which are designed to directly address all of the required attributes. The modules develop a students confidence, team working ability, industry knowledge, entrepreneurial skills, enterprise, continual personal and professional development (PDP), CV writing and ensures the students to engage proactively with the Industry.

Students will setup small fictional businesses with the aim to create VFX or Games products such as short films, animations, 2D and 3D visuals, games and digital composites. Students are assessed through practical outputs, peer review, presentations and individual professional development documenting. Students are taught business, enterprise and networking skills and have to act like an employee. Roles will be dynamic and changeable and have to be closely monitored by the team and the academic facilitator. Students have to regularly conduct peer reviews and will form part of the overall assessment strategy.

# PROGRAMME OUTCOMES

The awards in this programme are designed to develop in the student and assess attainment against Staffordshire University's interpretation of the National Qualifications Framework. The University has defines 8 generic outcomes

- 1. Knowledge and Understanding
- 2. Learning
- 3. Enquiry
- 4. Analysis
- 5. Problem Solving
- 6. Communication
- 7. Application
- 8. Reflection

The programme provides opportunities to develop knowledge and understanding, intellectual abilities, practical skills and transferable skills. The film awards have Incorporated Engineering Status from the Institute of Engineering and Technology.

These are also directly related to the QAA Engineering benchmark statement under the headings of:

- Science and Mathematics
- Engineering analysis
- Design
- Economic, social and environmental issues
- Engineering practice

Each of these headings has been considered and is used to help guide design of the curriculum. The table in the appendix of the award handbook shows which modules contain elements of the individual benchmarks.

The science of the technology we use plays a core role in many of our modules teaching the students engineering from a systems level as opposed to a component level. Students throughout the awards will develop skills in understanding the core technology of the equipment they use on both the software and hardware side including a small amount of mathematics relevant to the content being delivered.

### **Mapping of Programme Learning Outcomes**

This document shows the curriculum development of each award by the mapping of outcomes which can be seen in the following tables.

The award Learning Outcome Statements are included in the following section and detail a student's development as they progress to honours. The level learning outcomes are in the award handbook.

Award Outcome Statements: BSc Hons Digital Film and 3D Animation Technology

#### Knowledge and Understanding

Demonstrate a systematic understanding of key aspects of advanced 3d Modelling, 3D lighting, rendering, compositing, animation, filmmaking, including acquisition of coherent detailed knowledge equipment usage, capabilities and techniques.

### Learning

Demonstrate an understanding of the context of knowledge acquired

#### Enquiry

Demonstrate a professional approach to research through seeking data, theory and statistics

Analysis

Demonstrate the ability to analyse a problem through critical thinking and constructive argument backed by data or research.

#### **Problem Solving**

Demonstrate the skills necessary to understand and analyse a problem in order to create a complete technological and creative solution

#### Application

Apply critical reasoning and argument to show the ability to apply concepts in different contexts

#### Reflection

Demonstrate the ability to reflect on the effectiveness of specific technological solutions

### Communication

Communicate interpersonally either in the form of written or oral expression in a professional manner to a variety of audiences

# **PROGRAMME STRUCTURE, MODULES AND CREDITS**

## Award Structure: Digital Film and 3D Animation Technology

L E V	,	Feaching Block 1	CE70030-4 Digital Animation for VFX	CE70031-4 Digital Compositing 1	CE70034-4 Introduction to CGI	Options (15 or 30)
L 4		Feaching Block 2				Options (15 or 30)

(To progress to Level 4 at least 90 credits must be passed with at least 90 L4 credits)

L E V E	Teaching Block 1	CE70038-5 Digital Compositing 2	CE70039-5 Junior VFX Team Project	Option (30 only)	Options (15 or 30)
L 5	Teaching Block 2				

(To progress to Level 5 at least 90 credits must be passed with at least 90 L5 credits)

L E V E	Teaching Block 1	CE70042-6 FX Research Project	CE70043-6 Senior Team VFX Project	Option
6	Teaching Block 2	CE70041-6 FX Portfolio Project		Option

All options are 30 credits unless divided up into semesters.

Level 4 Options:

Digital Photography for VFX Digital Matte Painting: Environment Design 1 Character Concept Design 1

Level 5 Options:

Lighting and Rendering for CGI Digital Matte Painting: Environment Design 2 Character Concept Design 2 3D Modelling for VFX

Level 6 Options:

Sem 1

CE00657-6 Compositing for Film and Video (ending in 2013-14) CE00661-6 Matchmoving for Film and Video (ending in 2013-14) CE70044-6 Scripting Concepts for VFX (not running until 14-15)

Sem 2

CE00655-6 Lighting Techniques (ending in 2013-14) CE70023-6 Rigging for Games and VFX (not running until 14-15)

### **Teaching and Learning**

The learning and teaching strategy is guided by research conducted by the teaching staff into new and innovative methods of pedagogy. Our industrial colleagues inform our awards and staff skills are constantly updated in both visual effects and games concept design.

Teaching staff are industry facing and some also work part time on projects throughout the year which help to contribute to the innovative exciting courses. Introductory technical instruction sessions are taught by our technical staff, which are integrated into the modules. This is in support of your academic studies where you will be trained on equipment, health and safety, risk assessment, software and hardware.

The range of teaching and learning (LT) methods used is broad and diverse. The methods include lectures, tutorials, video tutorials, group work, problem based tasks and laboratory sessions with our virtual learning environment (Blackboard), Pebblepad and the Digital Academy online forum.

Students can expect 12 hours of teaching with an approximately 28 hours of additional work per week in year 1 and 2. Year 3 has 9 hours of student contact time with 31 hours of independent study as a student's ability and confidence to work independently are nurtured. A standard one hour lecture is conducted and then tutorials are run lasting between 1 and 3 hours. Masters level contains a great deal more independent study.

Video tutorials are a common technique and are used in some modules to deliver practical content. They offer students the opportunity to study the tutorials again without the aid of the tutor being present. And are repeatable.

Problem based learning is used in higher levels. A task is given during a tutorial and students are challenged to solve real world problems quickly, individually or in teams reflecting industry-working practices.

Compressed teaching methods are deployed during some modules. This is where the entire semester of tutor-student contact is conducted in the first six weeks of term.

Most of the programmes involve elements of teamwork and encourage students to work with their peers from higher levels to gain invaluable experience and tips on how to improve their work.

FX awards are challenging, creative and technological. Math's and science is embedded into some of the core modules at all levels of the degree but only when they are required and essential to understand the problem. Math's is not taught explicitly but delivered in small amounts in certain modules at all levels where appropriate to convey the subject, such as camera technology, compression formats and file types. An example is the teaching of matrices, photogrammetry and trigonometry. Maths is applied and has been designed to be relevant to the topic and so easier to understand and appreciate. Science and the technology is a key ingredient and understanding how things work is one of the main aims of the degrees.

PDP is used at all levels of the awards recording progress using Pebblepad to store important information such as CV's, work experience and any job searching completed.

The digital academy forum is used extensively throughout the awards for students to upload coursework and write reflectively. This allows both academic staff and fellow students to regularly peer review work to offer formative feedback.

Students are encouraged to participate with the professional world through study visits to film, TV, VFX (visual effects) houses, games, animation, film festivals and attend the visiting professorial lectures that take place each year.

The teaching staff maintain external industry contacts which provide feedback on current and new course developments. You, our students also provide feedback through the staff student liaison committee meetings and through our week 6 feedback week session.

### Assessment

A range of assessment techniques are used including presentations, demonstrations, written reports, practical work, oral tests, online tests, reflective log books, exams, class tests, portfolios, group work, peer assessments and online blogs and forums where students present their work. The method of assessment for each module has been carefully considered by the teaching teams to ensure the best possible outcome is achieved balanced with maintaining academic rigour.

The majority of assessments are course work based. We use some live briefs set by our industry colleagues throughout the awards, but more so in the higher levels. However, all assessments are designed as industry based tasks, whether live briefs or designed, as a typical job a student would encounter as a graduate working in industry.

The award content is a mixture of theory and practice, using exams wouldn't offer any educational benefits to the students. Therefore, there are no exams on the core modules but there are some multiple-choice tests on certain award specific options such as Digital Compositing 1.

A number of non-assessed formative multiple-choice tests are conducted in some modules. The tests are made available on Blackboard VLE for a week at a time and are designed to engage the students in active learning and gain an instant mark to help them understand their level of development.

Problem based learning tasks are generally assessed the following week by peers and/or tutors which develop the student's practical, theoretical, critical and analytical skills. The work has to be presented online or in class with a description on the learning and development cycle. The problems presented are outcome based and how the students get to a solution is managed with the help of the academic as the facilitator.

For feedback information and award regulations please see the award handbook.

Accreditation

None of these awards have accreditation at present.

## ADDITIONAL INFORMATION

### Entry Requirements (including IELTS score)

The awards in this programme are normally full time. The awards usually last three years full time, except in the case where the student opts to take a supervised year in industry after level 5. In that case the duration is four years. The current IELTS score is 6.5. Please contact the university admissions for more detail on **t**: +44(0)1782 292753 **e**: admissions@staffs.ac.uk or http://www.staffs.ac.uk/courses\_and\_study/undergraduate\_courses/how\_to\_apply

The FX Technology BSc suite of awards requires that for entry onto the first year (Level 4), applicants are normally required to have the following:

240 UCAS points with a minimum of 200 points from 3X4 units and 40 from either keyskills or AS levels

Or a pass in a recognised Access to Higher Education course or a Foundation Year

A student who has studied and passed a HND at another institution or at Staffordshire University will be reviewed by the award leader and the faculty recruitment manager to determine the suitable entry level to the award. The standard offer is to admit the student to level 5 of the FX awards. However, different routes are possible as detailed above.

### What qualifications would I need to join this programme?

The entry requirements for the award are normally: We accept students with A-Levels, BTEC nationals, Foundation degrees or the equivalent onto the awards. All students are interviewed and a combined point score of 280 is required preferably with a portfolio of previous work.

### **Disability Statement**

Staffordshire University operates a policy of inclusive teaching and learning to ensure that all students have an equal opportunity to fulfil their educational potential. Details about how to apply to have your needs assessed can be found at: http://www.staffs.ac.uk/courses\_and\_study/disabled\_students/index.jsp

# AWARD SPECIFIC INFORMATION

The module CE70042-6 FX Research Project (30) and CE70041-6 FX Portfolio Project modules (30) contribute to gaining honours classification. Both modules must be passed with the minimum of a grade point 4 or higher and cannot be compensated. Without passing these, a student cannot gain a BSc (Hons) qualification.

If a module has more than one assessed components, then the student must achieve a minimum mark of 30 % in each component and an aggregate mark of 40% to pass the module

The Level 5 module CE70017-5 Junior Collaborative Games Development and Testing module cannot be compensated. If students fail this module they can only retake with attendance. They may not proceed to the Level 6 module CE70076-6 Senior Collaborative Games Development and Testing module until they have passed Level 5 Junior Collaborative Games Development and Testing.

The placement year is considered as either a pass or fail. With the pass contributing to the award of sandwich degree.

If a total of 300 Credits are achieved over Levels 4,5 and 6 instead of the required 360 credits for the Honours Degree, then it is assumed that the student has not fully demonstrated the qualities of Staffordshire Graduate. In this case the student will be offered a Non-Honours Degree.

Four unauthorised absences from a module will result in being withdrawn from the module. This replaces the current guidance of four consecutive unauthorised absences.

Further information about the award can be found in the relevant Student Handbook and on the University Website. This includes information about optional modules, learning outcomes at levels below honours, student support, and academic regulations.

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### THE STAFFORDSHIRE GRADUATE

The Staffordshire Graduate represents a set of qualities that the University passionately believes is necessary for success in the 21<sup>st</sup> century. The Staffordshire Graduate is a reflective and critical learner with a global perspective, prepared to contribute in the world of work.

The table below indicates where, within your award, these characteristics are addressed:

AWARD TITLE: CGI and Digital Effects,	Digital Film and 3D Animation Technology a	nd Games Concept Design	
Characteristic	Award Module(s) including level and number of credits	Method of Assessment	
Work-ready and employable	Junior VFX Team Project (L5, 30 credits)	Student teams will operate as a fictional company to develop individual showreels, portfolio and VFX film products. They will be assessed through personal logbooks and presentations.	
	Senior VFX Team Project (L6, 30 credits)	Student teams will operate as a fictional company to develop individual showreels, portfolio and VFX film products. Possibly the same company as in their 2 <sup>nd</sup> year. They will be assessed through personal logbooks and presentations.	
Understanding of enterprise and entrepreneurship	Junior VFX Team Project (L5, 30 credits)	Students will study business development and networking as they develop their businesses. This is assessed during the written work from students showing evidence of their research, PDP and applications.	
	Senior VFX Team Project (L6, 30 credits)	Students will study business development and networking as they develop their businesses. This is assessed during the written work from students showing evidence of their research, PDP and applications.	
Understanding of global issues and their place in the global economy	Junior VFX Team Project (L5, 30 credits)	Research is required into the industry to see what's hot and what's not. Studying the global monster of the VFX industry and how this 24hr business operates with data management and workflows. This is assessed in the presentations.	
	Senior VFX Team Project (L6, 30 credits)	Research is required into the industry to see what's hot and what's not. Studying the global	

		monster of the VFX industry and how this 24hr business operates with data management and workflows. This is assessed in the presentations.
	Digital Compositing 1 (L4, 30 credits)	Understand the multinational global environment for the VFX industry.
Communication skills	Digital Photography 1(L4, 30 credits) Digital Compositing 2 (L5, 30 credits)	Students are required to write reflective blogs of their work on the digital academy forum which is assessed summatively.
	Senior VFX Team Project (L6, 30 credits) Junior VFX Team Project (L5, 30 credits)	Students are required to write reflective blogs of their work on the digital academy forum which is assessed formatively and summatively.
	Junior Collaborative Game Development and Testing (L5, 30 Credits) Senior Collaborative Game Development and Testing (L6, 30 Credits)	Students are required to write reflective blogs of their work on the digital academy forum which is assessed formatively and summatively.
	Character Concept Design 1 (L4, 30 credits) Character Concept Design 2 (L5, 30 credits)	Students are required to write reflective blogs of their work on the digital academy forum which is assessed formatively and summatively.
Presentation skills	Digital Photography for VFX(L4, 30 credits)	Presentations are used for students to present and defend their practical work
	Junior VFX Team Project (L5, 30 credits) Senior VFX Team Project (L6, 30 credits)	Presentations are used for students to present and defend their practical work
	Junior Collaborative Game Development and Testing (L5, 30 Credits) Senior Collaborative Game Development and Testing (L6, 30 Credits)	Presentations are used for students to present and defend their practical work
	Character Concept Design 1 (L4, 30 credits) Character Concept Design 2 (L5, 30 credits)	Presentations are used for students to present and defend their practical work
The ability to interact confidently with colleagues	Junior VFX Team Project (L5, 30 credits)	Module requires students to work in teams, present in teams, communicate with industry and attempt to find industry based briefs to turn into a short VFX film. Students will have to engage with the lower year students during a feedback week to discuss their work with them. This will be recorded through Pebblepad or blogs to show how they are engaging with peers.
	Senior VFX Team Project (L6, 30 credits)	Module requires students to work in teams, present in teams, communicate with industry and

	Junior Collaborative Game Development and Testing (L5, 30 Credits) Senior Collaborative Game Development and Testing (L6, 30 Credits)	<ul> <li>attempt to find industry based briefs to turn into a short VFX film. Students will have to engage with the lower year students during a feedback week to discuss their work with them. This will be recorded through Pebblepad or blogs to show how they are engaging with peers.</li> <li>Module requires students to work in teams, present in teams, communicate with industry and attempt to find industry based briefs to turn into a functional and marketable game. Students will have to engage with the lower year students during a feedback week to discuss their work with them. This will be recorded through Pebblepad or blogs to show how they are engaging with the lower year students</li> </ul>
Independence of thought	Junior VFX Team Project (L5, 30 credits) Senior VFX Team Project (L6, 30 credits)	Independent contributions are assessed and development record which is reviewed regularly. Independent contributions are assessed and measured through the production of a personal
	Junior Collaborative Game Development and Testing (L5, 30 Credits) Senior Collaborative Game Development and Testing (L6, 30 Credits)	development record which is reviewed regularly.Independent contributions are assessed andmeasured through the production of a personaldevelopment record which is reviewed regularly.
	Lighting and Rendering for CG (L5, 30 credits)	Individual practical assessment including innovative and creative outcomes is assessed through personal research, application and analysis. Recorded on the student's blog.
	Digital Compositing 1 (L4, 30 credits)	Individual practical assessment including innovative and creative outcomes is assessed through personal research, application and analysis. Recorded on the student's blog.
	Junior VFX Team Project (L5, 30 credits) Senior VFX Team Project (L6, 30 credits)	<ul> <li>Production of a short VFX film in a team and aim to show it at festivals and in competitions.</li> <li>Production of a short VFX film in a team and aim to show it at festivals and in competitions.</li> </ul>
	FX Research Project (L6, 30 credits) FX Portfolio Project (L6, 30 credits)	These modules give the students the honours part of their awards. They are individual in the

		research, application and testing. They are assessed through individual written reports, presentations and interviews.
Ability to carry out inquiry-based learning and critical analysis	Junior VFX Team Project (L5, 30 credits)	Research and reflection based written work alongside a practical assessment
	Senior VFX Team Project (L6, 30 credits)	Research and reflection based written work alongside a practical assessment
	Digital Compositing 1 (L4, 30 credits)	Research and reflection based written work alongside a practical assessment
	Lighting and Rendering for CG (L5, 30 credits)	Research and reflection based written work alongside a practical assessment
	FX Research Project (L6, 30 credits) FX Portfolio Project (L6, 30 credits)	These modules are individual in the research, application and testing. They are assessed through individual written reports, presentations and interviews.
Skills of problem solving and creation of opportunities	Junior VFX Team Project (L5, 30 credits)	Practical work will show skills in problem solving and with the outcome of researching suitable exhibitions, festivals and competitions to enter their work.
	Senior VFX Team Project (L6, 30 credits)	Practical work will show skills in problem solving and with the outcome of researching suitable exhibitions, festivals and competitions to enter their work.
	Digital Compositing 1 (L4, 30 credits) Digital Compositing 2 (L5, 30 credits) Digital Matte Painting 2 (L5, 30 credits)	Problem solving is developed from day 1 on all of our degrees. This module demands creative and technical problem solving to find answers to solving the problems presented. Practical assessment and individual innovation required and is assessed through presentation of practical and written work on the digital forum.
	FX Research Project (L6, 30 credits) FX Portfolio Project (L6, 30 credits)	These modules are individual in the research, application and testing. They are assessed through individual written reports, presentations and interviews.
Technologically, digitally and information literate		All FX modules at all levels are heavily IT based using computer software, hardware and Internet based services. Example: Uploading weekly updates of computer based practical and written

Able to apply Staffordshire Graduate attributes to a range of life experiences to facilitate life-long learning	Junior VFX Team Project (L5, 30 credits) Senior VFX Team Project (L6, 30 credits)Digital Compositing 1 (L4, 30 credits) Introduction to CGI ( L4, 30 credits)Digital Compositing 2 (L5, 30 credits) 3D Modelling for VFX (L5, 30 credits)All FX awards are designed to introduce core industry skills in L4 and then build and finesse these skills throughout the degrees.	<ul> <li>work to the digital academy forum for a variety of modules.</li> <li>Uploading weekly updates of computer based practical and written work to the digital academy forum for a variety of modules.</li> <li>Uploading weekly updates of computer based practical and written work to the digital academy forum for a variety of modules.</li> <li>Uploading weekly updates of computer based practical and written work to the digital academy forum for a variety of modules.</li> <li>Uploading weekly updates of computer based practical and written work to the digital academy forum for a variety of modules.</li> <li>This directly references life long learning because the content demands continual life long development and skill development</li> </ul>
	Junior VFX Project (L5, 30 credits) Senior VFX Project (L6, 30 credits) Junior Collaborative Game Development and Testing (L5, 30 credits) Senior Collaborative Game Development and Testing (L6, 30 credits)	Personal reflective reviews are used to assess a students continual professional development
	A number of guest lectures will facilitate students understanding of the professional world of work	

Notes:

### Award Modules

Indicate which module(s) within the award develop this characteristic

### Assessment

Indicate how achievement of the characteristic is assessed



## ADDENDUM FOR DELIVERY AT A PARTNER INSTITUTION

Name and location of partner	Asia Pacific Institute of Information Technology Technology Park Kuala Lumpur Malaysia
Partnership Context	The awards listed below will be part of a franchise arrangement with Staffordshire University.
Awards to be offered at partner	BSc (Hons) Digital Film and 3D Animation Technology BSc (Hons) CGI and Digital Effects
Aims / Learning Outcomes	As detailed in the SU Programme Specification. There will be some local contextualization in relation to examples and projects and also where relevant comparisons will be explored between Western and Asian approaches and issues.
Curricula	As detailed in the SU Programme Specification except that the following modules which are optional in the SU curriculum will be compulsory in the curriculum offered at APIIT: <b>BSc (Hons) Digital Film and 3D Animation Technology</b> Level 4, Character concept Design 1 Level 5: 3D Modelling for VFX; Character Concept Design 2 Where relevant comparative consideration of Asian and European practices will be explored.
Teaching and Learning	As specified in the SU Programme Specification. Delivery will be by APIIT staff with support from SU and with online access to SO materials as appropriate. An agreement has been made with Media Prima, a leading Malaysian broadcasting, advertising and media company for them to support students through projects, internships, graduation employment and to also support learning materials development as well as provide hands on experience and classroom based contributions. Discussions have stated with Astro, the leading regional satellite broadcasting company, to secure similar support from them.
Assessment	As specified in the SU Programme Specification. All summative assessment will be prepared by APIIT staff and verified and moderated by External Examiners

Admissions Criteria	As detailed in the SU Programme Specification having regard to local equivalents as agreed with SU
Specific Regulations	None
Date of completion	June 1 <sup>st</sup> 2012