UNIVERSITY of BRADFORD

Module Descriptor

Introduction to Digital Visual Effects

Module Code:	GAV4009-B
Academic Year:	2018-19
Credit Rating:	20
School:	Department of Media Design and Technology
Subject Area:	Games, Animation and Visual Effects
FHEQ Level:	FHEQ Level 4
Pre-requisites:	Introduction to Digital Visual Effects 2017-18
Co-requisites:	

Contact Hours

Type	Hours
Lectures	12
Laboratory	24
Directed Study	164

Availability Periods

Occurrence	Location/Period
BDA	University of Bradford / Semester 2 (Feb - May)

Module Aims

The module will explore the core techniques and tools of digital post production and visual effects so that students will start to be able to create realistic images and effects.
The module will cover the breadth of the visual effects pipeline both 2D and 3D
Students will create and render both dynamic and fluid simulations.
The students will develop the necessary digital compositing techniques to bring all assets together seamlessly.

Outline Syllabus

- The Foundry: Nuke X
- Side Effects Software: Houdini

- Photographic capture methods and lighting,
- Chroma Key Footage Acquisition,
- Fluid dynamics,
- Destruction pipelines,
- Volumetric simulations,
- lens effects,
- Rotoscoping,
- On Set data collection,
- Matchmoving and Tracking (2D/3D),
- Multi-pass rendering,
- Software-based chroma keying,
- 3D matte painting

Module Learning Outcomes

On successful completion of this module, students will be able to...

1 1.1 Demonstrate knowledge of the process of creating photorealistic images.
1.2 Understand the range of current post-production and visual effects techniques;
1.3 Deconstruct and choose appropriate tools in the creation of visual effects and post-production sequences.

2 2.1 Create high quality photorealistic computer graphics using industry-standard visual effects software;
2.2 Use industry standard compositing software to combine rendered visual effects with live action footage.

3 3.1 Complete a brief to a deadline;
3.2 Critically evaluate and reflect upon the application of academic studies to working practice;

Learning, Teaching and Assessment Strategy

Delivery will be through a series of lectures and directed reading to provide the theoretical background of visual effects techniques and technologies (LO 1.1, 1.2 1.3), and lab-based tutorials to develop practical skills (LO 1.1, 1.2, 1.3, 2.1, 2.2).
The remainder of the time is spent on coursework (LO 3.1, 3.2). A project (L0 1.1, 1.2, 1.3, 2.1, 2.2) accompanied by a Showreel presentation (LO 3.1, 3.2) tests all learning outcomes.

Supplementary assessment is to repair deficiency in the original submission.

Mode of Assessment

Type	Method	Description	Length	Weighting	Final Assess'
Formative	Presentation	Students will present their initial ideas to modules tutors for feedback and	15 minutes	%	No

		guidance			
Summative	Presentation	An in-class presentation to showcase your work and discus the production pipeline along with a video breakdown of your shot. Time: 5 minutes in length with 5 minutes questions and answers.	10 minutes	20%	No
Summative	Presentation	Produce and deliver a presentation that clearly outlines the proposed approach and treatment of the brief. Time: 5 minutes in length with 5 minutes question and answers.	10 minutes	10%	No
Summative	Coursework	A project to produce a photorealistic set of images incorporating computer generated effects	2 minutes	70%	No

Legacy Code (if applicable)

Reading List

To view Reading List, please go to **rebus:list**.