COURSE CONTENT

Course Code	DT2015
Course Title	Advanced 3D Production
Pre-requisites	DT2001
No of AUs	3
Contact Hours	39 hours studio contact

Course Aims

This intermediate to advanced course provides you the opportunity to expand and refine your knowledge and abilities in the area of 3D digital screen production. You will engage with advanced and alternative processes as you explore and experiment with a range of digital methods such as motion capture, visual effects, real-time animation and rendering, and alternative forms of digital narrative. Each offering of this course will have a unique focus, and will grant you a unique set of skills for future development.

Intended Learning Outcomes (ILO)

By the end of the course, you should be able to:

1. Discuss contemporary 3D digital processes and technique that address specific screen-narrative demands.
2. Develop original digital solutions for unique narrative requirements.
3. Create an innovative production that demonstrates high proficiency with advanced digital processes.
4. Critique the techniques and approaches to the creation of a 3D digital production.
5. Contribute constructively in team-based situations to critique and solve narrative and technical challenges.

Course Content

In this course you will engage with a specific topic of digital 3D production:

- real-time animation and rendering
- motion capture
- visual effects
- alternative forms of digital narrative.

While each year will have its focus, all topics include elements from the other topics.
The specific topic for each year will be announced at course advising sessions during course selection events.

Whichever topic you take, you will experience the same innovative and experimental approach as you freely explore your own original expression of 3D digital production. All topics are considered to be intermediate to advanced, and provide you the opportunity to extend yourself into new leading-edge areas.

Real-time animation and rendering

In this topic you will work with alternative 3D animation and rendering processes, using 3D animation and game-engine software. New paradigms of animation, motion, editing and rendering will be explored. Game engine technology is developing rapidly, and offers great potential for new, creative ways to achieve high quality results that compliment current methods of creating digital narratives.

Motion Capture

Motion capture is firmly situated in many industries, such as animation, cinema special effects, digital game design, dance, music, as well as non-entertainment areas such as sports medicine, science, industry and emergency training and many forms of motion study. The course offers the opportunity to extend motion capture into these areas, plus high quality performance and artistic exploration.

Visual Effects

This topic explores the creation of visual things that do not exist. Visual Effects is a broad area that includes dynamics such as fire, smoke and water, automation such as swarms of creatures, or more subtle effects such as the inclusion of anything into video footage in an entirely convincing manner. Visual effects crosses into all aspects of screen production, and is a valuable skill for the future.

Alternative forms of digital narrative

Advanced 3D Production also offers the opportunity to explore and experiment with new forms of narrative. All screen imagery is a story in some way, and the digital medium alters how any story is told and received. In this topic you will explore unique narrative aspects of digital processes such as VR, 360 video, mo-cap, game engine narrative, first-person video, and any digital format or combination available.

Class structure

The first 6 weeks of the course focuses on learning new techniques and processes, how these are applied, and free exploration and experimentation.
The second half of the course focuses on applying the learning to a project that demonstrates high proficiency with advanced digital processes and the application to a meaningful narrative.