

MTD221 3D Visual Effects (VFX)

Level: 2

Credit Units: 5 Credit Units

Language: ENGLISH

Presentation Pattern: EVERY JAN

Synopsis:

MTD370 3D VFX aims to introduce the students to the world of visual effects and the production methods used. Students will learn to use Blender 3D to create and animate basic 3D models for use in visual effects production shot. Compositing in Blender 3D will be covered in the course and it allows different media sources to be combined together. Students can experiment with using complex operations like rotoscoping and green screen keying effects in compositing. Match tracking or tracking is a valuable skill and will allow visual effects artists to extract the motion of a camera or an object on the live plate. Students will learn this technique which is used heavily in modern visual effects where it can be used to stabilize shots, add 3D elements to match the background, attach 3D elements to a tracked subject or even do set extensions. A variety of particle generation and simulation effects tools will be explained and demonstrated in this course. Students can make use of such tools to create more realistic smoke, fire or weather effects. Simulation effects such as collapsing wall after it has been hit by a metal wrecking ball and a school of fishes swimming in the water can be produced. The students will develop experience in rendering their movie once the effects are completed.

Topics:

- Introduction to Visual Effects
- Image Production Theory
- Layout and Perspective Matching
- Introduction to Blender 3D
- Lighting in Visual Effects
- Animation in Blender 3D
- Compositing in Blender 3D
- Tracking in Blender 3D
- Simulation effects
- Weather and Environment VFX
- Scene Creation
- Rendering

Textbooks:

Steve Wright: Digital Compositing for Film and Video: Production Workflows and Techniques (ebook)
4th Focal Press
ISBN-13: 9781315283999

Learning Outcome:

- Appraise visual effects production techniques.
- Analyse lighting use in visual effects for a 3D environment.
- Evaluate 3D models, basic materials, lighting and rendering for visual effects creation.
- Apply lighting and animation in visual effects.
- Implement compositing and tracking in a visual effects production.
- Develop a movie with all the effects shots rendered in.

Assessment Strategies - Regular Semester (Evening Class):

Components	Description	Weightage Allocation (%)
Overall Continuous Assessment	TUTOR-MARKED ASSIGNMENT 1	15
	TUTOR-MARKED ASSIGNMENT 2	15
Overall Examinable Components	ECA	70
Total		100

*The information listed is subject to review and change.