NFTS | NATIONAL FILM AND TELEVISION SCHOOL

Course Outline: VFX: Lighting and Compositing (MA) - 1-Year Full-Time

Course Overview

The MA VFX: Lighting and Compositing is a one-year specialist Master's degree for students who want to master the visual and technical language of contemporary screen storytelling. It focuses on the design, lighting, and composition of shots within the context of visual effects and virtual production, combining artistic intent with technical precision.

The course trains students to think and work like digital cinematographers – practitioners who use light, movement, and spatial design to tell visual stories. They explore the relationship between real-world cinematography and digital image creation, learning to stage, light, and composite moving shots that combine live action, CG, and virtual environments. Through hands-on work in Houdini, and Nuke, students develop the skills required for camera layout, lighting, and compositing.

This is a course about vision and craft. Students learn how to previsualise sequences, design and light cinematic moments, and integrate live action with digital assets to achieve professional visual coherence.

Taught by industry professionals and delivered through workshops, supervised studio practice, and collaborative projects, the course mirrors the working conditions of a professional VFX or virtual production studio. It is designed for those who want to specialise early in their careers and enter the industry as onset VFX specialists, lighting artists, or compositors.

The MA VFX: Lighting and Compositing runs over three terms. In the first term students establish the principles of shot design, previs, and layout, followed by an introduction to lighting for integration. In the second term they apply those foundations to compositing and on-set work. In the third term, they develop creative, expressive lighting across a short sequence and then participate in a School-wide collaborative project. Running throughout the year, the Master's Portfolio module provides space for reflection, research, and critical engagement with creative and professional practice.

Graduates leave with a professional portfolio, a solid technical grounding, and an artistic understanding of cinematic lighting and visual storytelling suited to high-end VFX, animation, and virtual production environments.

Course Structure

Term 1: Foundations of Cinematic Craft

Module 1 – Foundations of Shot Conceptualisation

This introductory module establishes the conceptual, technical, and aesthetic foundations for advanced practice in lighting and compositing for visual effects. From the outset, the focus is on image integration, shot-based thinking, and the role of light in unifying disparate elements into a coherent cinematic image. You will explore how lighting, colour, lensing, and compositing decisions shape meaning, realism, and emotional impact in contemporary film, television, and short-form content.

Rather than beginning with asset creation, this module positions you directly within the shot pipeline, reflecting professional VFX practice where lighting and compositing artists are responsible for final image quality and narrative clarity. You will work with photographic plates, CG elements, and simple proxy assets to understand how light, colour space, and image structure operate across live-action and digital material.

The module mirrors industry workflows used in feature film, high-end drama, and advertising, where lighting and compositing teams must interpret creative intent, technical constraints, and on-set data to deliver finished images. It establishes the visual literacy, technical grounding, and critical awareness required for subsequent modules in cinematic lighting, on-set VFX, and advanced compositing.

Module 2 – Lighting for Integration

This module provides the technical foundation for lighting and integration, focusing on how to reproduce real-world illumination digitally. Students learn image-based lighting workflows, capturing HDR data and using it to light CG elements within live-action or photographic contexts. Through exercises in Houdini and Unreal Engine, they explore the reproduction of day and night environments, shadow behaviour, and light interaction. The final outcome is a static composite demonstrating seamless integration between a CG object and a real or photographic plate, accompanied by an analysis of lighting capture and methodology.

Term 2: Integration and Compositing

Module 3 – On-Set VFX and Compositing

In this module, students learn to bridge physical performance and digital set design by working with real actors on a fully green-screened stage and integrating CG environments around them. Unlike traditional workflows that add digital elements to live-action backgrounds, this project reverses the process: students design, light, shoot, and composite live-action performances into entirely constructed CG or matte-painted worlds, created in collaboration with students from the MA Digital Worldbuilding. Working in small production teams, they storyboard, plan, and film a 10- to 15-second shot featuring up to two actors interacting with practical props and simple, green-painted structures such as doorways, stairs, or corners. The live performances provide the core of the shot, while the surrounding environments are digitally designed and composited in post-production.

Module 4 – Cinematic Lighting
This module explores lighting as an expressive and narrative art. Students design and deliver a short sequence of three or four shots that demonstrate contrast, colour, motivation, and silhouette - the core principles of cinematic lighting. Working across Houdini and Unreal Engine, they experiment with physically based rendering, hero lighting, and stylised approaches to visual storytelling. They also use AI tools for lighting reference generation and look development, testing creative ideas quickly before final refinement. The project demonstrates their ability to balance realism and style, producing visually coherent sequences that communicate emotion and intent through light.

Term 3: Collaboration and Synthesis

Module 5 – Cinematic Shotcraft: From Miniature to Screen
The final term focuses on collaboration and synthesis. Working with students from Digital Worldbuilding, Model Making, Composing, and Sound Design, participants lead the visual design and execution of a short hybrid cinematic piece that combines physical miniatures and digital environments. Their role is to direct lighting, shot composition, and camera motion, ensuring continuity between on-set capture and digital integration. They participate in the shoot, collect lighting and camera data, and oversee the digital realisation of the sequence in Unreal Engine. The result is a finished short sequence that mirrors the workflow of a professional hybrid production and demonstrates their capacity to collaborate across departments and disciplines.

Module 6 – The Master's Portfolio (long-thin module) Running across all three terms, the Master's Portfolio provides a framework for reflection, research, and critical engagement. Through seminars, tutorials, and self-directed study, students document and evaluate their creative practice, situating it within wider cultural, professional, and technological contexts. The module encourages them to reflect on their development as visual storytellers and technicians, and to articulate the connections between their creative process, their learning, and the rapidly changing landscape of VFX and virtual production.

The portfolio may include written reflections, annotated project breakdowns, research into professional practice, and contextual analysis of key themes such as authorship, collaboration, AI-assisted creativity, and the relationship between real and virtual cinematography. The Master's Portfolio ensures that students graduate not only as skilled practitioners but as critically aware professionals capable of navigating and influencing the future of the screen industries.

Learning Experience
The MA VFX: Lighting and Compositing is built on the NFTS model of high-intensity, production-based education. Each term builds on the previous one, moving from conceptual understanding to creative mastery. Students learn through workshops, supervised studio sessions, technical masterclasses, and group critiques. Collaboration is integral, providing experience of professional working relationships and production structures.

By the end of the course, students will have developed:

- Expertise in shot design, camera layout, and previz
- A professional understanding of lighting and compositing workflows
- Creative control over cinematic lighting design and digital storytelling
- Experience of collaborative production within a professional pipeline
- A critical awareness of their own creative and professional development

Graduates will be prepared for employment as onset VFX specialists, lighting artists, or compositors.