NFTS | NATIONAL FILM AND TELEVISION SCHOOL

Course outline: MA in Animation for Film and Games

The MA in Animation for Film and Games is a specialisation within the broader MA in Film and Television.

This course is a comprehensive and practical 1-year MA programme. It explores the theory and craft of creating animations digitally for both games and film using industry standard tools. It introduces many technical aspects of animation, including mechanical and organic animations, rigging and weight painting, sequencing and storytelling, as well as exporting animation to real-time tools, such as game engines. Students will learn how to be animation practitioners by bringing scenes and objects to life digitally through established animation techniques that incorporate timing, motion, and emotion. By the end of the course, students will develop the industry-valued skills and knowledge required to create professional-grade digital animations for use in gaming and film, including Virtual Production. This course has practical integrations with other NFTS courses, which allow students to apply their skills.

The course curriculum is divided into five modules, three workshops, and the Master's Portfolio, exploring a comprehensive and exciting animation landscape in a linear and progressive way. The learning journey is designed for newcomers to this multidisciplinary field, seeking to establish a broad but competent technical fluency in a range of industry-standard software and tools. There are seven assessment points throughout the modules to measure a student's academic and professional progress across all learning outcomes. Each module and workshop feature a brief-document to outline the material and learning ahead of them.

Workshop: Fundamentals
Real-time Animation is a rapidly changing, multi-disciplinary field. It relies heavily on ideas from science, mathematics, optics, filmmaking and narrative design. Animation is especially exciting because it empowers storytellers and other creatives to participate in arts, culture and business in an impactful way. It empowers them to create interesting characters, diverse worlds and social impact through screen media that is emotionally long-lasting and powerful. This workshop introduces the landscape of contemporary animation in software and tools. It explores common software, processes, tools and concepts that you will encounter frequently as an animator working in both filmmaking and games. This includes powerful software, such as Game Engines (like Unreal and Unity), and asset creation tools, like Blender and Maya, and also generative AI tools. In addition, you will explore key theories and ideas underpinning animation, such as the 12 principles of animation. By understanding this foundation, you will develop greater confidence in approaching animation as a valuable and independent creative, being able to research and problem solve more effectively.

Module 1: Create a Dynamic Character Sequence
In this practical assignment you will work individually as a character animator to design and implement a fully animated character sequence using provided assets. This sequence could be for a potential video game or an interactive application, or a pre-viz for an animated short, using a real-time game-engine or content creation software. You may work alongside another student at the school on an extant project (such as a game or film), or else you may work on a scene that is provided to you by the course team alongside any related guidance. In all cases, you must adhere to the creative specifications outlined here. In response, you must deliver a meaningful, animated, cinematic sequence that demonstrates your understanding of cameras, lighting, scene

design, atmosphere, and broader animation principles covered throughout. You must consider sensitively the motion of all virtual cameras, the timing of animation events and the framing of shots; showing special concern for emotional impact. The purpose of this assignment is to demonstrate your technical knowledge and skills in character animation in your final deliverable. On completion, you will deliver a fully animated sequence working effectively. You are encouraged further to collaborate across the school on this project where relevant, consulting with Real-time Producers, Animation Directors, Games Developers, Cinematographers, and others.

Module 2 – Build a Playable Character
In this practical assignment you will work individually as a character animator to design and implement a fully animated character for a potential video game or an interactive application using a real-time game- engine, as specified by the course team. You may work alongside a game developer at the school on an extant game project, or else you may work on a game project that is provided to you by the course team alongside any related guidance. In all cases, you must adhere to a creative brief negotiated with the game designer about the needed animations, or ones assigned to you by the course team, as well as any specifications outlined here. This animation set must be suitable for gameplay that is at least 3 minutes in runtime, and it must appropriately and thoughtfully respond to any relevant player interactions, such as player conversation choices or player movement wherever applicable. You must consider sensitively the motion of all virtual cameras, the timing of animation events and the framing of shots in relation to the character; showing special concern for emotional impact and resonance. The purpose of this assignment is to demonstrate your technical knowledge and skills in animation across all modules of this course so far in your final deliverable.

Module 3 – Build a Character Animated Scene
In this practical assignment you will work in groups of either two or three within the cohort to collaboratively design and create a two-character short animation according to an inspirational theme, fully rendered to a video file in at least HD standard. The course team will provide you with the theme at the module start, along with at least two-character models. You must create an appropriate scene for two characters from pre-made assets only. In your teams, you must respectfully negotiate a meaningful story according to the theme by creating a screenplay, and then deliver that story through character animation, cinematics and animation generally. You may collaborate with Composers and Sound Designers, and you may use pre-existing sound or music assets. This project must result in a rendered short film with a maximum duration of two minutes, which could be added your professional showreel. Through this film, your team must clearly demonstrate their learning in animation so far and especially demonstrate an appreciation of animation as a storytelling form, with an understanding of character psychology; of emotion, intention, hopes and aspirations. By the end of this module, you will develop a greater understanding of how the underlying, technical craft of animation blends seamlessly with the craft of storytelling.

Workshop – Rigging a Character
In this practical assignment you will work individually as both an animation director and a technical animator. You must use Content Creation software, as recommended by the course team, to fully rig and animate a designated character mesh, and you must finally render the completed animation sequence as a video file in MP4 format in at least HD quality. You may also work alongside a VFX student at the school on an extant mesh or asset, or else you may work on a designated asset that is provided to you by the course team alongside any related guidance. This asset will be a humanoid character, alongside a scene or environment with props. Using the unrigged asset as a starting point, you must design an original, animated sequence that tells your own story and clearly demonstrates an extensive use and knowledge of rigging, along with all your knowledge from the course so far. You must act as the creative director of this work, as well as the animator; choosing the theme, styles and shots. The final rendered video must be no longer than 2 minutes in runtime, and it must fully showcase your skills development on the

course as an animator. You are encouraged to collaborate with other students at the school on your work, such as VFX Students, Sound Designers and others.

Module 4 – VR Experimental Animation
In this practical assignment you must work as a pair within the animation cohort to design and build and animated, educational cinematic in Virtual Reality, using a variety of technologies; including game engines, motion capture, scanning tools, AI and other tools considered by the course team during this module. You must use Content Creation software, as recommended by the course team, to build and animate an experimental experience that brings together your learning on the course into a cohesive experience. This experience should include a non-traditional, non-humanoid character. You must act as the creative co- director of this work, as well as the animator; choosing the theme, styles and shots. The final, executable build of your work must be no longer than 2 minutes in runtime, and it must fully showcase your skills development on the course as an animator. You are encouraged to collaborate with other students at the school on your work, such as Producers for real-time, VFX Students, Sound Designers and others.

Workshop – Contextual Animation
Animation consists not only in solid meshes and their moving parts, or in humanoids and their expressions, but also in the rich variety of intangible systems and dynamics that surround us every day, as well as among animal life and creatures from our imagination. These animation types force us to question the indivisibility and the stability of objects. This module offers a high-level overview of alternative animation purposes, specifically building and animating non-humanoid rigs, such as quadrupeds or fantastical creatures, and for animating clothing and costumes for characters, such cloaks and space suits. By the end of this workshop, you will have developed greater confidence working with non-humanoid animations.

Module 5 – Real World Project
In this practical assignment you will work individually as a versatile, creative animator. You must use any available and relevant software, such as content creation software or game engines, as well as all your course experience. This should be directed towards creating a fully animated sequence for a game, or a short film, or a virtual production film, or any other potential real-time piece of work, such as a product visualisation, live event or a theme park installation. You may collaborate with an Animation Director, or a Game Designer or any Filmmaking student to support creative direction for the project, or you may choose to direct your own project entirely yourself. The final deliverable must tell a single, cohesive and original story through animation and it must substantively showcase your individual learning throughout the course. Your animation should further showcase at least one technical skill that you have consistently improved upon throughout the course, in response to prior tutor feedback, or in line with your career aspirations, for example, VR or Rigging or Virtual Cameras. Your final deliverable may be only one of the following options: 1). A fully rendered HD animation of your story in MP4 format of no more than 2 minutes duration; or 2). A fully playable and interactive build of a game or experience whose average playtime is no longer than 2 minutes in duration.

Master's Portfolio
The Master's Portfolio requires you to demonstrate evidence of, and critical reflection on, your professional and creative practice throughout the course. The final portfolio should not only act as a record of your work on the course but as a dynamic document that critically examines your journey, growth, and the evolving relationship between your creative practice and professional skills and aspirations in film and TV. You will submit your portfolio before your final Progress Review, in which you should be prepared to answer questions on it.