

Course Details	
Lead Provider	University of Bristol
Embedded Qualifications (including Awarding Body)	Not accredited or credit bearing.
	100 hours
Guided Learning Hours GLH (Contact)	Several of our network have kindly agreed to offer open studio visits to their own facilities for the learners on this Skills Bootcamps. These visits will take place during the Skills Bootcamp - we are currently working to determine dates for when these will be offered. It will be expected that each learner on the Skills Bootcamp will engage with at least one in person open studio visit.
	Each learner will also be offered mentoring with Gritty Talent to support their career development and a 1:1 with our Authorised Unreal Trainer answering any questions they have in order to get their Unreal Virtual Environment ready for the Virtual production LED. These sessions will be flexibly arranged around your and staff availability.
Non-GLH (Non-contact)	Varied depending on how many "extra" hours you can/want to put into developing your skills and knowledge further in addition to the GLHs. Education materials, software and further online links/videos will be made available through the University's Virtual Learning Environment, to engage with outside of the GLHs but there will be no assumption made that you will be able to have the time commitment to engage with this material outside of the GLHs.

The information provided below is intended to provide an indicative curriculum of the Skills Bootcamp in Virtual Production with Unreal. The University of Bristol and delivery partners reserve the right to change the curriculum and delivery format.



Week 1	Monday 9 December - Welcome and Induction (½ day In person) Introduction to the course to settle learners in and make sure they are aware of the structure of the Skills Bootcamp, a reminder of the expectations of them as learners and what they can expect from the educational delivery team, and all the support provided (both as directly part of the Skills Bootcamp itself but also the wider University of Bristol as a registered student). We will also be inviting some guest speakers from our network to speak about the impact Virtual Production has had on their work and workflows to get the learners all excited about their own careers upon completion of the Skills Bootcamp. Wednesday 11 December - Empowering Tomorrow - cultivating inclusive collaboration and future skills (½ day Online)
	In this session we explore the role of equity, diversity and inclusion in creative collaboration and delve into the skills necessary to thrive in 2025.
Week 2	 Unreal Engine Training (5 days In person) Monday 16 December - What is a Games Engine? (Full Day In person) Downloading and Installing Unreal: Learn how to set up an Unreal Engine environment, including account creation and version management. Using Asset packs and bringing in custom Assets: Discover how to import ready-made and custom assets like characters and props to speed up your project development. General Framework: Understand the basic structure of a game engine, focusing on Unreal's architecture for building games. Navigating the Unreal Interface: Get comfortable with the Unreal Editor, including key panels, menus, and shortcuts. Static Mesh Types: Explore different types of static meshes, which are essential for creating detailed environments and objects.
	 Tuesday 17 December (Full Day In person) Lighting: Learn how to effectively use lighting to set the mood, atmosphere, and visual aesthetics in your game scenes. Materials: Understand how to create and apply materials to objects, giving them realistic textures and appearances. Physics: Dive into Unreal's physics engine to simulate realworld dynamics like gravity, collisions, and interactions.



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Week 2	 Simulation: Explore simulation techniques for creating more immersive and interactive environments within your game. Audio: Learn the basics of integrating sound effects and music, enhancing the overall player experience. Wednesday 18 December (Full Day In person) Landscapes: Master the tools for creating vast, detailed landscapes that form the backbone of your game's environment. Level Building: Focus on assembling and designing game levels, ensuring they are both functional and visually appealing. Water plugin: Implement realistic water features, utilizing Unreal's water plugin for lakes, rivers, and oceans. Particles: Create and manipulate particle systems to add dynamic effects like fire, smoke, and explosions to your scenes. Thursday 19 December (Full Day In person) Blueprints: Get hands-on with Unreal's visual scripting system, allowing you to create complex gameplay mechanics without writing code. Sequencer: Learn how to use Unreal's cinematic tool for creating cutscenes, camera movements, and other animations. Particles: Further your understanding of particle systems, focusing on more advanced effects and optimizations. Friday 20 December (Full Day In person) Advanced Blueprints: Explore deeper into Blueprint scripting, enabling more complex and refined game logic. Individual Project Focus: Allocate time for students to refine their projects, adding final touches and features with instructor guidance.
Week 3	 Friday 3 January 2025 (½ day Online) Introduction to Virtual Production (VP) & In Camera VFX (ICVFX) How VFX evolved into Virtual Production. The history of the technological advancements in filmmaking will be discussed, to provide a contextual understanding of the development of virtual production and its significance to the advancement of the industry. What is Virtual Production? An overview of key elements of Virtual Production will be detailed and presented to provide a foundational understanding of this discipline.



	A showcase montage will be shown of the variety of virtual production applications and types of productions that are applying
	virtual production to their projects.
Week 3	 The ICVFX / VP Onset Team Roles & Responsibilities - Pre-Production & Onset Overview of each role and their responsibilities within the VP team The numerous roles involved in Virtual Production will be detailed and discussed, including the responsibilities of the role holders and how they all fit together in the VP team. On Set Responsibilities The On Set experience and 'chain of command' is specifically detailed and discussed by reviewing the organisational chart on a variety of virtual productions with real world examples (HETV, Film, Documentary, Music Video). Students will participate in breakout sessions to workshop a real scenario and design the virtual production team required based off the production requirements. Core Competencies - soft skills and technical competencies. The core competencies required to be a successful crew member of a Virtual Production will be detailed and discussed, with differentiation between critical and
	advantageous skills.
Week 4	 Monday 6 January 2025 (½ day Online) The Virtual Production & ICVFX Content Workflows The Content Approaches for Virtual Production
	A masterclass case study presented by an industry expert in Virtual Production will provide real-world examples of these approaches in practice.
	Tuesday 7 January 2025 (½ day Online) How to successfully produce a Virtual Production shoot • VP Producer panel shares their experience and top tips A range of VP Producers will present their experience and top tips to effectively schedule, budget and produce a virtual



production shoot. This will provide an overview of key workflows from concept to completion. A forum for Q&A will allow students to gain information directly from experts. This section will also feature key introductions to roles from outside of the Virtual Production studio team such as gaffers, Art Directors and DOP's to provide critical areas of consideration, outside of content production, for producers when undertaking a VP shoot.

A masterclass deep dive case study presented by an experienced VP Producer will provide a clear real-world example to bring these insights to life.

Week 4 Wednesday 8 January 2025 - Meet the Volume (Full day In Person)

- VP Systems Introduction
 The technology systems that make up the Volume will be thoroughly explained, and participants are able to move around within the Volume and interact with the key elements to build familiarity ahead of the demos.
- Camera Tracking Introduction A more detailed discussion of camera tracking with live 'hands-on' experience with the hardware and software components.
- Media Server Introduction
 A more detailed discussion of the importance of media servers with live 'hands-on' experience with the hardware and software components.
- Virtual Production Communications On Set
 A practical 'On Volume' walkthrough of the key
 communication hierarchies when working with large crews to
 deliver a virtual production.

Thursday 9 January - 2D Plate Live Demos (Full day In Person)

- 2D Content workflow recap from online sessions
 The learnings made on the online session will be refreshed and reinforced
- Live Virtual Production Demos 2D Plate Playback
 A real virtual production film shoot will be undertaken.
 Participants will get hands-on: forming production company
 style teams, be supplied with plate scenes and props to work
 with and create mini scripts for shooting using the techniques
 and tools they have learned in the training. The teams will be



Week 4	supplied with camera & lighting kits with support from the studio VP team in order to undertake a live virtual production and ICVFX shoot. Friday 10 January 2025 - 3D Real-time Live Demos (Full day In Person) • Using Unreal Engine scenes in a Virtual Production shoot An experienced Unreal Engine Operator and VP Supervisor will outline an overview of the VP toolset within Unreal Engine, Virtual Art Department (VAD) Basics alongside the Basic Principles of Creating Content for VP, how to optimise and measure performance. Key software will be detailed and discussed. • Student Unreal scene review An experienced Unreal Engine Operator and VP Supervisor will workshop the scenes created by students in the prior Unreal Engine training. Specific commentary on the suitability of each scene for virtual production will be discussed. • Live Virtual Production Demos - 3D Real-time Playback A real virtual production film shoot will be undertaken. Participants will get hands-on: forming production company style teams, using the Unreal Scenes they have created in the prior Unreal training. Using props they have sourced to compliment the scenes, they will generate mini scripts for shooting using the techniques and tools they have learned in the training. The teams will be supplied with camera & lighting kits with support from the studio VP team to undertake a live virtual production shoot. • Expert panel review Members of our MARS Academy team will participate in a panel discussion of the students project work, providing feedback to each teams live virtual production shoot. A Q&A session will be facilitated to reinforce the learnings.
Week 5	 Wednesday 22 January - Career Mapping Workshop - navigating your career path and crafting the perfect cv. (½ day In Person) We create a physical career map with a five-year plan to visualise career goals and address barriers. In a CV masterclass facilitated by a leading talent manager, we learn how to make your cv stand out from the crowd.



	Combined Authority
Week 6	 Wednesday 12 February - Connections and Conversations - networking and interviewing for career success. (½ day In Person) In this practical session we share tips to strengthen your network and help secure future work. You will learn how to deliver a winning interview and put the technique into practise with your peers. Thursday 13 February - Friday 14 February - Flexible time within the MyWorld facilities for development of your personal Unreal and VP project
Week 7	Monday 17 February - Thursday 20 February - Flexible time within the MyWorld facilities for development of your personal Unreal and VP project Friday 21 February - Networking event across both Skills Bootcamps, with opportunity to show learners' work. (½ day In person) • Guests from our network will also be invited so that they can see learners work and provide a networking opportunity.
Week 8	 Wednesday 26 February - Embracing Inclusive Leadership - communication and conflict resolution for stronger teams (½ day Online) Whether leading a whole team or just one person, the principles of inclusive leadership will create harmonious teams. We share ideas on what makes a good leader and techniques for resolving challenges.
Week 9	Friday 7 March - Meet the Employers - face-to-face networking event in Bristol (½ day In Person) • The sessions culminate in an in-person networking event. We match you with the most relevant local employers and facilitate exclusive ten-minute chats with multiple contacts.