

Course Details	ourse Details		
Lead Provider	University of Bristol		
Embedded Qualifications (including Awarding Body)	Not accredited or credit bearing.		
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 much "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.



Tuesday 17 June - Welcome and Induction (½ day In person at MyWorld Sheds, near Temple Meads, University of Bristol)

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 a guest speaker 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.

Learners will also have a tour of the MyWorld facilities.

Wednesday 18 June - Introduction to Virtual Production (VP) & In Camera VFX (ICVFX) (½ day Online)

- 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.

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 1



Week 1	 Thursday 19 June - Career Mapping and CV Workshop (½ day In person at MyWorld Sheds, near Temple Meads, University of Bristol) - navigating your career path and crafting the perfect cv. We facilitate our learners to create a career map with an actionable plan to implement career goals, explore how to promote your transferable skills and encourage personal progression. In a practical CV masterclass, we explore how to make your cv stand out from the crowd, looking at various CV formats and styles.
	Friday 20 June - The Virtual Production & ICVFX Content Workflows (½ day Online) • The Content Approaches for Virtual Production Understanding and exploring in detail the key approaches utilised for the creation of the digital environments to be displayed on the volume. This will cover the three main approaches typically used within commercial productions today. Exploring the pros and cons of each, understanding their limitations and when one should be used over another.
Week 2	 Unreal Engine Training - School of Computer Science, Merchant Venturers Building, Clifton Campus, University of Bristol Monday 23 June (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.
	 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 real-world dynamics like gravity, collisions, and interactions. 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.



Week 2	 Thursday 26 June (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.
	 Friday 27 June (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.
Week 3	 Monday 30 June Unreal Training (Full Day In person, School of Computer Science, Merchant Venturers Building, Clifton Campus, University of Bristol) 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	Tuesday 1 July How to successfully produce a Virtual Production shoot (½ day Online) • 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.
	Wednesday 2 July, Thursday 3 July, or Friday 4 July Planning your Virtual Production shoot (½ day In person at MyWorld Sheds, near



Temple Meads, University of Bristol)
Each learner will be allocated into a production team. Each production
team will then be required to attend a full day to start to plan their V

team will then be required to attend a full day to start to plan their VP shoots. We will confirm which of these dates you will be required to attend upon confirmation of a place on the Skills Bootcamp.

1:1 Mentoring with Gritty Talent - session 1 offered in week 2 for learners to sign up for. All learners must have completed 2 hours of 1:1 mentoring with Gritty Talent. In person or online depending on learner preference.

In person Virtual Production Practical Training at MyWorld Sheds, near Temple Meads, University of Bristol

Week 4

Monday 7 July - 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.

Tuesday 8 July or Wednesday 9 July - 2D Plate Live Demos (Full day In Person)

- Production Teams 1 & 2 8th July
- Production Teams 2 & 3 9th July
- 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 supplied with camera &
 lighting kits with support from the studio VP team in order to
 undertake a live virtual production and ICVFX shoot.



Week 4	 Thursday 10 July or Friday 11 July - 3D Real-time Live Demos (Full day In Person) Production Teams 1 & 2 - 10th July Production Teams 2 & 3 - 11th July 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	 Thursday 17 July - Connections and Conversations - networking and interviewing for career success. (½ day In Person at MyWorld Sheds, near Temple Meads, University of Bristol) In this practical session we share tips to strengthen your professional network and help secure future work. You will learn how to deliver a winning interview and put the technique into practice with your peers.
	1:1 Mentoring with Gritty Talent - session 1 offered in week 6 for learners to sign up for. All learners must have completed 2 hours of 1:1 mentoring with Gritty Talent. In person or online depending on learner preference.
	Deep-dives in Unreal topics/Unreal mentoring may also be provided in week 5.



Week 6	1:1 Mentoring with Gritty Talent - session 1 offered in week 6 for learners to sign up for. All learners must have completed 2 hours of 1:1 mentoring with Gritty Talent. In person or online depending on learner preference.
Week 7	Wednesday 30 July - Embracing Inclusive Leadership - communication and conflict resolution for stronger teams (½ day In person at MyWorld Sheds, near Temple Meads, University of Bristol) • 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 8/9/10	7, 12, 14, or 19 August - Production Team Shoot Day (In person at MyWorld Sheds, near Temple Meads, University of Bristol) Each production team will have a full day in the VP studio to shoot. O Week 8 - Thursday 7 Aug: Production Team 1 O Week 9 - Tuesday 12 Aug: Production Team 2 O Week 9 - Thursday 14 Aug: Production Team 3 O Week 10 - Tuesday 19 Aug: Production Team 4 1:1 Mentoring with Gritty Talent - session 2 offered in week 10 for learners to sign up for. All learners must have completed 2 hours of 1:1 mentoring with Gritty Talent. In person or online depending on learner preference.
Week 11	Tuesday 26 August - Friday 29 August (25th is a Bank Holiday) 1:1 Mentoring with Gritty Talent - session 2 offered in week 11 for learners to sign up for. All learners must have completed 2 hours of 1:1 mentoring with Gritty Talent. In person or online depending on learner preference.
Week 12	Wednesday 3 September - Industry Networking Event - face-to-face networking event in Bristol (Full day In Person at MyWorld Sheds, near Temple Meads, University of Bristol) • We aim to match you with the most relevant local employers and facilitate exclusive chats with multiple contacts. An opportunity to meet leaders and senior creatives from a variety of companies from the Bristol and South West Creative Sector for curated short



'chats'.

Tuesday 2, Thursday 4 or Friday 5 September - Networking and celebration event with opportunity to show learners' work (½ day In person at MyWorld Sheds, near Temple Meads, University of Bristol) We will confirm which of these dates you will be required to attend upon confirmation of a place on the Skills Bootcamp.

• Guests from our network will also be invited so that they can see learners work and provide a further networking opportunity.