

Course Details		
Lead Provider	University of Bristol	
Embedded Qualifications (including Awarding Body)	Not credit bearing. All the learners will have an opportunity to complete SONY's accreditation test for the VENICE 2 cameras - if they pass this test they will receive a Certificate of accreditation as a camera operator for Sony's VENICE 2.	
	60 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	
	This 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.



Wednesday 17 December - 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). Learners will also have a tour of the MyWorld facilities.

Thursday 18 December - Mastering Inclusive Teamwork - communication and conflict resolution for stronger teams (½ day In person at MyWorld Sheds, near Temple Meads, University of Bristol)

 Inclusive teams perform better- that's a fact. We will look at how to embed Equity Diversity and Inclusion (ED&I) into your daily work and equip you with the knowledge and tools to build and work in inclusive teams where everyone can thrive and succeed.

Friday 19 December - 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.

Week 1



	Combined Authority
	 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 2	Wednesday 7 January - 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.
	 Monday 12 January - 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. Looking to the future can feel overwhelming but having a plan makes it easier. This session helps you map out your career and create an actionable plan. You'll learn how to highlight your transferable skills, support your personal progression and in a hands-on CV masterclass, discover how to make your CV stand out whilst exploring different styles and formats.
Week 3	Tuesday 13, Wednesday 14, Thursday 15 and Friday 16 January - Sony VENICE 2 Training - (In person School of Computer Science, Merchant Venturers Building, Clifton Campus, University of Bristol) For the practical hands-on parts of the VENICE 2 training sessions, we will break into two smaller groups to maximise everyone's use of the VENICE 2 cameras, so you may not be required to attend all day on the four dates. We will confirm with learners the exact timings they will be required to attend on these dates upon acceptance on the course.
	This part of the course will show you how to become an accredited Sony VENICE 2 operator. You will learn the function and operation of every control, indicator and connector. You will also see how all the camera's menus work and how they affect the camera's operation, learning how to shoot creatively with a VENICE camera.
	Accreditation test Upon completion of this part of the course learners will be issued with an accreditation test. If they pass this test run by SONY they will be provided with a Certificate of Accreditation which proves a good operational understanding of the VENICE 2 camera.
	An Introduction to VENICE 2 This part of the course introduces the camera, its target user and intended shooting scenarios.



This includes:

- Camera construction, form factor & modular design.
- The VENICE 2 sensor and shooting options.
- Selecting and using media.
- Shooting RAW, X-OCN, S-lop3, and proxies.
- Common accessories, setups, and licensed options.
- Explanation of all the formats available.
- HDR functionality.
- Anamorphic de-squeeze in all formats.
- 6:5 anamorphic mode.
- \$709 monitoring.
- Setting up frame lines.
- Gyro display and recording.

VENICE 2 colour science and sensor

This part of the course explains the colour science and dynamic range aspects of VENICE 2.

This includes:

Week 3

- Understanding the CIE colour space diagram.
- The VENICE 2 native gamut and colour spaces.
- Understanding latitude.
- How colour and dynamic range are captured.
- Setting up and using Dual Base ISO and latitudes.
- How LUTs work with VENICE 2.
- Introduction to X-OCN and data rates.
- Using a data rate calculator.
- AST files & generating ART Plus with RAW viewer.

VENICE 2 controls, indicators & connectors

This part provides a detailed explanation of every VENICE camera control, indicator and connector.

This includes:

- Providing power and switching on VENICE 2.
- Video and audio controls and connectors.
- Connecting a Viewfinder.
- Remote and network control operations.
- Introduction to Live mode, using an RCP and RM.

VENICE 2 lens mount and extension options

This part takes a look at the VENICE two lens mount and CBK-3ó10XS extension options.

This includes:

- The VENICE PL and E mount options.
- The sensor position and ND Fiter controls.
- Using adaptors and extenders.
- Using the VENICE CBK-3610XS extension system.



The VENICE 2 menu structure

This part provides a detailed technical explanation of every menu item in the VENICE 2 camera.

This includes:

- Operating the Sub Display and Mini Display.
- Using the Home, User Functions, Basic & Full menus.
- Selecting a shooting mode and recording format.
- Controlling video & audio outputs and monitoring.
- Controlling colour dynamic range and look.
- Controlling the technical aspects of VENICE 2.
- Performing a factory reset and setting defaults.

VENICE 2 setup and recording operations

This part shows how to set up VENICE 2 ready for a shoot and how to make recordings.

This includes:

- Viewfinder & on-set monitoring, using Hi-Low Key.
- VENICE 2 genlock.
- Setting up recoding modes and formats.
- Saving camera configurations on an SD Card.
- Continuous recording with VENICE 2.
- Setting up simultaneous hi-res/proxy recording.
- Recording with high ISO (Dual Base ISO).
- Performing picture cache recording.
- Setting up record review and using false colour.
- Setting up and using Focus Magnifier.
- Using exposure controls & aids.
- Using Double Speed Scan function.

Clip operations and playback with VENICE 2

This part of the course explains how VENICE 2 folders and clips are named, and how to initialise clip naming at the beginning of a project. This includes:

- VENICE 2 clip metadata
- Accessing & understanding Clip List.
- Selecting and reviewing AXSM or SxS clips.
- Switching media & adopting a secure backup policy.

Understanding errors, warnings and cautions

This part explains some of the errors and warnings that may occur then using VENICE 2, and some of the cautionary messages VENICE 2 can provide.

This includes:

- Understanding error codes, warnings & cautions.
- Handling media, power and temperature warnings.
- Fan removal and cleaning.
- Extensive hands-on of VENICE 2, CBK-ó10XS, etc.

Week 3



	Combined Authority
Week 3	Workflow operations This part of the course will show how to post-produce and otherwise process VENICE 2 recordings. This includes: Practical fleet of Colour Space. Monitors and HDR settings. Card readers, AXS Utility & data management. Using RAW Viewer. Effects of under and over exposure on material. Essential colour correcting with X-OCN and Resolve. Working with S-lop3 material. Using LUTs, for a consistent look from set to post. Generating ART files and using them in the camera. Essential VENICE recording trading techniques.
Week 4	Tuesday 20 January - 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 21 January - Planning your Virtual Production shoot (Full 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 VP shoots.
	In person Virtual Production Practical Training at MyWorld Sheds, near Temple Meads, University of Bristol
	 Monday 26 January - 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 27 January or Wednesday 28 January - 2D Plate Live Demos (Full day In Person) We will confirm which of these dates you will be required to attend upon confirmation of a place on the Skills Bootcamp and allocation to a production team.

- Production Teams 1, 2 & 3 27 January
- Production Teams 4, 5 & 6 28 January
- 2D Content workflow recap from online sessions The learnings made on the online session will be refreshed and reinforced

Week 5

• 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.

Thursday 29 January or Friday 30 January - 3D Real-time Live Demos (Full day In Person) We will confirm which of these dates you will be required to attend upon confirmation of a place on the Skills Bootcamp and allocation to a production team.

- Production Teams 1, 2 & 3 29 January
- Production Teams 4, 5 & 6 30 January
- 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 6	Tuesday 3, Thursday 5 or Friday 6 February - Production Team 2D Shoot Day (½ day In person at MyWorld Sheds, near Temple Meads, University of Bristol) Each production team will have a half day in the studio for their 2D shoot. We will confirm which of these dates you will be required to attend upon confirmation of a place on the Skills Bootcamp and allocation to a production team. • Production Teams 1 & 2 - 3 February • Production Teams 3 & 4 - 5 February • Production Teams 5 & 6 - 6 February Wednesday 4 February - 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, you'll learn how to utilise and expand your professional network to help secure future opportunities. We'll share tips on how to effectively pitch yourself and make lasting connections as well as perform at your best in an interview situation.
	10, 11, 12, 17, 18 or 19 February - 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. We will confirm which of these dates you will be required to attend upon confirmation of a place on the Skills Bootcamp and allocation to a production team. Tuesday 10 Feb: Production Team 1 Wednesday 11 Feb: Production Team 2 Thursday 12 Feb: Production Team 3 Tuesday 17 Feb: Production Team 4 Wednesday 18 Feb: Production Team 5 Wednesday 19 Feb: Production Team 6



Wednesday 4 March - 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'.

Week 9

Thursday 5 March - Celebration event (½ day In person at MyWorld Sheds, near Temple Meads, University of Bristol)

- An event to celebrate the completion of the course and a chance to screen what learners have filmed (if learners wish to) within the Cinema.
- Speakers from our network will also be invited to give a talk about their VP work and provide a further networking opportunity.