Prifysgol Wrecsam
Wrexham University

Module specification

When printed this becomes an uncontrolled document. Please access the Module Directory for the most up to date version by clicking on the following link: Module directory

Module Code	EDS426
Module Title	Foundations of Immersive Technologies
Level	4
Credit value	20
Faculty	FSLS
HECoS Code	100368
Cost Code	GAEC
Pre-requisite module	N/A

Programmes in which module to be offered

Programme title	Core/Optional/Standalone
Standalone module aligned to Certificate in Education Post-compulsory Education and Training (PCET) for QA and assessment purposes	Standalone

Breakdown of module hours

Learning and teaching hours	16 hrs
Placement tutor support hours	0 hrs
Supervised learning hours e.g. practical classes, workshops	20 hrs
Project supervision hours	0 hrs
Active learning and teaching hours total	**36** hrs
Placement hours	0 hrs
Guided independent study hours	164 hrs
Module duration (Total hours)	200 hrs

Module aims

This module aims to introduce participants to a range of immersive technologies through a hands-on, exploratory approach.

The module encourages curiosity, experimentation, and reflection on how these technologies can be applied within academic, professional, and creative contexts, enabling participants to:

- Gain an understanding of basic functions and features of immersive technologies
- Explore the use of immersive technology to support their role within subject disciplines/industry
- Build confidence in the use of immersive technologies

Module Learning Outcomes
At the end of this module, students will be able to:

1	Identify and demonstrate a range of immersive technologies and their functions within educational, professional, and creative contexts.
2	Explore and demonstrate the use of basic features in selected immersive tools through guided practical application.
3	Reflect on your learning and development through engaging immersive technologies.

Assessment
Indicative Assessment Tasks:
This section outlines the type of assessment task the student will be expected to complete as part of the module. More details will be made available in the relevant academic year module handbook.

Assessment 1: Participants will need attend several workshops relating to a range of immersive technologies. During the workshops participants will be able to demonstrate their knowledge, understanding and competency through a series of tasks and activities. These will be recorded in a workbook. Participants will need to demonstrate competency in at least six of the twelve technologies being showcased in the workshops.

By the end of the module, your workbook will showcase your journey through various technologies and highlight key takeaways from your hands-on experience.

Assessment number	Learning Outcomes to be met	Type of assessment	Duration/Word Count	Weighting (%)	Alternative assessment, if applicable
1	1, 2, 3	Coursework	2000 words	Pass/Fail	

Derogations
N/A

Learning and Teaching Strategies

This module has been designed to offer an inclusive, exploratory, and flexible approach to learning that supports both staff and students in building confidence with immersive technologies. Aligned with Wrexham University's **Active Learning Framework (ALF)**, the module blends hands-on experience, self-directed learning, and peer collaboration to ensure a dynamic and responsive learning journey.

The module is delivered over a series of twelve technology-themed workshops, that can be accessed through the year. These workshops will provide an accessible, low-pressure environment that encourages participation. Each themed session is repeated multiple times throughout the year to ensure maximum flexibility for those unable to attend on a specific date. This open format supports a wide range of learner availability and learning preferences, reinforcing the inclusive ethos of the course.

At the heart of this module is an emphasis on **practical, experiential learning**. Participants will interact directly with a range of immersive tools including virtual reality, extended reality, 360° media, digital simulation platforms, and more.

Welsh Elements

All asynchronous (pre-recorded) content developed in line with ALF principles will be available in Welsh and English. Participants on the programme will be encouraged to explore the development of their own content through both Welsh and English.

Indicative Syllabus Outline

- 360° Storytelling & Scenario Design in Immersive Environments
- Building Experiences in XR: "From Headsets to the Metaverse"
- Immersive Simulation & Scenario-Based Learning
- Interactive Wearables & Portable Technology for Immersive Applications
- 3D Scanning, Photogrammetry & Digital Twins for Immersive Environments
- Designing Immersive Experiences: Planning, Collaboration & Co-Creation
- AI for Immersive Media: Generative Tools, Agents & Interaction
- Immersive Problem Solving & Decision-Making
- Motion Capture for Immersive Performance & Interaction

Indicative Bibliography:

Please note the essential reads and other indicative reading are subject to annual review and update.

Essential Reads

Doerner, R., Broll, W., Grimm, P., & Jung, B. (2022). *Virtual and Augmented Reality (VR/AR): Foundations and Methods of Extended Realities (XR).* Springer.

Other indicative reading

Stevens, R. (2021). *Designing Immersive 3D Experiences: A Designer's Guide to Creating Realistic 3D Experiences for Extended Reality (Voices That Matter)*. Peachpit Press.

Dalton, J. (2021). *Reality Check: How Immersive Technologies Can Transform Your Business*. Kogan Page.

Administrative Information

For office use only	
Initial approval date	01/08/2025
With effect from date	01/09/2025
Date and details of revision	
Version number	1