



Three-Month Course: AR/VR Technologies and the Use of the Matterport Platform

1. Course Objective

This course aims to develop students' competencies in using augmented and virtual reality (AR/VR) technologies, including the practical use of the **Matterport Pro3 camera** and **Matterport Cloud platform** for creating virtual tours, digital exhibitions, virtual labs, and interactive spaces.

2. Learning Objectives

By the end of the course, students will be able to:

- Explain the basic concepts of Augmented Reality (AR) and Virtual Reality (VR).
- Identify the components and functions of the Matterport Pro3 camera.
- Perform 3D scans of real environments using the device and its dedicated application.
- Process and edit 3D spaces using the Matterport Cloud platform.
- Create interactive labels (Mattertags) and multimedia integrations.
- Design and publish customized virtual tours.
- Work collaboratively on real-world projects linking AR/VR technology with their vocational field.

3. Duration and Structure

Total: 12 weeks × 2 hours per week = **24 instructional hours**
(approximately 3 months, combining theoretical and practical learning)

4. Course Modules

Week / Module	Topic	Content / Core Skills	Methodology	Expected Outcome
Weeks 1–2	Introduction to AR and VR Technologies	Basic AR/VR concepts, examples of use in industry, tourism, education,	Lecture + video demonstrations	Students explain AR/VR differences and identify fields of application.

		and VET.		
Week 3	Introduction to the Matterport Platform	Account creation, interface, functionality, examples of virtual tours.	Practical demonstration	Understand the structure and basic use of the platform.
Weeks 4–5	Matterport Pro3 Device and Scanning Process	Device setup, tablet connection, positioning, lighting, data storage.	Hands-on practice	Students complete their first scan of a real environment.
Weeks 6–7	Uploading and Editing in Matterport Cloud	Uploading scans, building 3D models, basic adjustments, and exporting.	Individual exercises	Students edit real models and prepare them for publication.
Week 8	Mattertags and Interactive Content	Adding texts, images, links, and videos to specific points in the tour.	Group work	Apply Mattertags for information and navigation in virtual spaces.
Weeks 9–10	Creating Professional Virtual Tours	Real-world simulations: chemistry labs, kitchens, multimedia studios, etc.	Guided project	Create professional, customized virtual tours.
Weeks 11–12	Final Project & Presentation	Development and presentation of the final project.	Group work + public presentation	Present final virtual tours and receive peer and instructor feedback.

5. Resources and Equipment

- **Matterport Pro3 Camera**
- **iPad / tablet** with Matterport Capture app
- Active **Matterport Cloud** account
- Laptops with internet access
- Project-sharing platform (**RICe 360**)
- Real environments for scanning (classrooms, labs, business premises)

6. Assessment Methods

Component	Weight
Participation and practical engagement	20%
Weekly exercises (scanning, editing)	30%
Final project (Virtual Tour / AR-VR Space)	50%

7. Competencies Developed

- Digital and technological innovation competence

- Lifelong learning competence
- Teamwork and project management competence
- Professional competence for applying technology in vocational fields

8. Final Outcomes

At the end of the course, students will be able to independently develop:

- A **3D virtual tour** of a real environment created using the Matterport Pro3;
- An **interactive presentation project**, suitable for exhibitions, promotion, or digital training.