



LEARNING UNIT: Digital Space Visualization with Matterport Technology

Summary of the Learning Unit

The learning unit *“Digital Space Visualization with Matterport Technology”* introduces trainees to the use of three-dimensional visualization tools and the creation of digital twins of real spaces through the Matterport platform. The trainee will learn how to capture environments using a Matterport Pro camera or a mobile device, upload data to the cloud, generate automatic 3D models, and edit them using Matterport Workshop. The course also covers the addition of information points (Mattertags), creation of virtual tours, measurement of distances, and integration of the final results into websites or educational platforms.

Expected Learning Outcomes

Upon completion of the learning unit, trainees will be able to:

- Describe the operation and core principles of Matterport technology and the concept of the “Digital Twin.”
- Apply best practices for scanning indoor and outdoor spaces using a camera or mobile device.
- Manage and edit scan data within the Matterport Cloud environment.
- Add information tags (Mattertags), text, multimedia, and external links.
- Create complete virtual tours for educational or commercial use.
- Measure distances and surfaces within the 3D environment.
- Embed completed Matterport projects into websites, e-learning platforms, or AR/VR applications.
- Adopt a positive attitude toward the use of innovative digital documentation and educational tools.

Number of Teaching Hours per Week

Laboratory (2), Total (2).

Total weeks: 10

Indicative Equipment

- Matterport Pro camera or equivalent 3D scanning device
- Mobile devices with the Matterport Capture application installed
- Matterport Workshop (cloud-based software)
- Computers with internet access and projection equipment
- Indoor and outdoor spaces suitable for practical scanning exercises

Indicative Teaching Methodology

The unit combines theoretical presentation of the basic operating principles of the Matterport system with hands-on practice in real scanning and 3D modeling conditions (project-based learning).

Group work is encouraged, culminating in a collective project involving the digital visualization of a chosen space, to be presented at the end of the course.