

TASK O3/A1. IT production of BIMEPD Open Educational Resource.



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1. INTRODUCTION

Open Educational Resources (OER) refers to digital teaching, learning and research materials that allow for their use, adaptation and redistribution by others without restriction or with limited restrictions. The OER phenomenon is of great importance and interest in the future of teaching and education, both in vocational training and university settings. For this reason, it was necessary to develop an online and fully accessible platform hosting all the results and materials produced in the project at the service of society and stakeholders of this project.

An Open Educational Resource has been designed and produced to support the implementation of the curriculum produced by the BIMEPD project. Multimedia materials have been produced for the Open Educational Resource (OER).

The materials are based on multimedia resources: presentations, video recordings, images, etc. in combination with the training materials produced in IO1. The OER is fully intuitive, so that the user is fully involved in the learning process and is adapted to adult education. This material is extremely important in the sector, due to the lack of modern materials adapted to the project stakeholders.

Furthermore, the nZEB (Net-Zero Energy Building) aspects, sustainable construction methods, the use of BIM technologies in building design and the new LCA (Life Cycle Assessment) regulations have been the basis for a strong adaptation to these new challenges at adult education level.

The BIMEPD OER and all the information about the project are available in the following url:

- BIMEPD project web: <https://bimepd.eu/>
- BIMEPD OER: <https://bimepd.eu/oer/>

2. BIMEPD WEBSITE

2.1. DEVELOPMENT OF BIMEPD WEBSITE

This website of the BIMEPD project was created by CTM during the first period of the project and it is used as a common place to share the products of the project and base of the dissemination activities.



HOME

ADAPTED SENIOR TRAINING PROGRAM ON BIM METHODOLOGIES FOR THE INTEGRATION OF EPD IN SUSTAINABLE CONSTRUCTION STRATEGIES



Once all the graphic details of the website, the menu and the logos were decided, designed and implemented, basic information about the project, such as the summary, the objectives, the list of reports developed during the project, etc., started to be included. Subsequently, the finalised documents resulting from the research and studies carried out by the project partners have been uploaded.

The BIMEPD website includes the main intellectual outputs of the project. It should be noted that the entire website is available in all the languages of the project partners. For the translation of the available contents, all project partners participated by providing translations into their mother tongues.

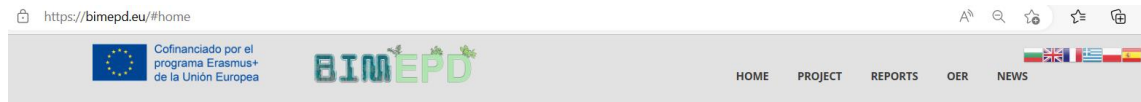
Link to BIMEPD project web: <https://bimepd.eu/>

2.2. PRESENTATION OF BIMEPD WEBSITE

In the following picture, it should be seen the different section in which the BIMEPD project website is divided and the links to each of these sections.

2.2.1. HOME

Link: <https://bimepd.eu/#home>



HOME

ADAPTED SENIOR TRAINING PROGRAM ON BIM METHODOLOGIES FOR THE INTEGRATION
OF EPD IN SUSTAINABLE CONSTRUCTION STRATEGIES



2.2.2. PROJECT

Link: <https://bimepd.eu/#project>


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https://bimepd.eu/#project

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BIMEPD PROJECT

HOME PROJECT REPORTS OER NEWS



PROJECT

The construction sector is a sector in continuous updating due to the integration of new technologies for the design of projects and the incorporation of environmental considerations of construction materials. This incessant and rapid modernisation of the labour system requires constant and continuous training of the professionals in the sector, most of whom have professional careers of more than 20 years' experience. In Europe there are 600,000 architects, 64% of whom are over 40 years old.

In recent years there has been a large decline in the number of architects working independently, in favour of an increase in work in companies and firms. The percentage of architects practising individually has fallen by up to 50% in the last decade. These tendencies suggest that architects are returning to a paid employment in the practice, instead of free exercise, assuming that they will have to adapt to the design systems established in the companies, much more prone to modernization and integration of innovative methodologies, complicating the incorporation of professionals with extensive experience whose training does not fit the current design tools.

The environmental profile is an increasingly important criterion for public and private procurement and for consumer choice. Companies and professionals have various mechanisms for accrediting and communicating the environmental excellence of their products and services, including Environmental Product Declarations (EPDs). These EPDs provide a reliable, relevant, transparent, comparable and verifiable environmental profile that allows an environmentally friendly product to stand out, based on LCA according to international standards and quantified environmental data.

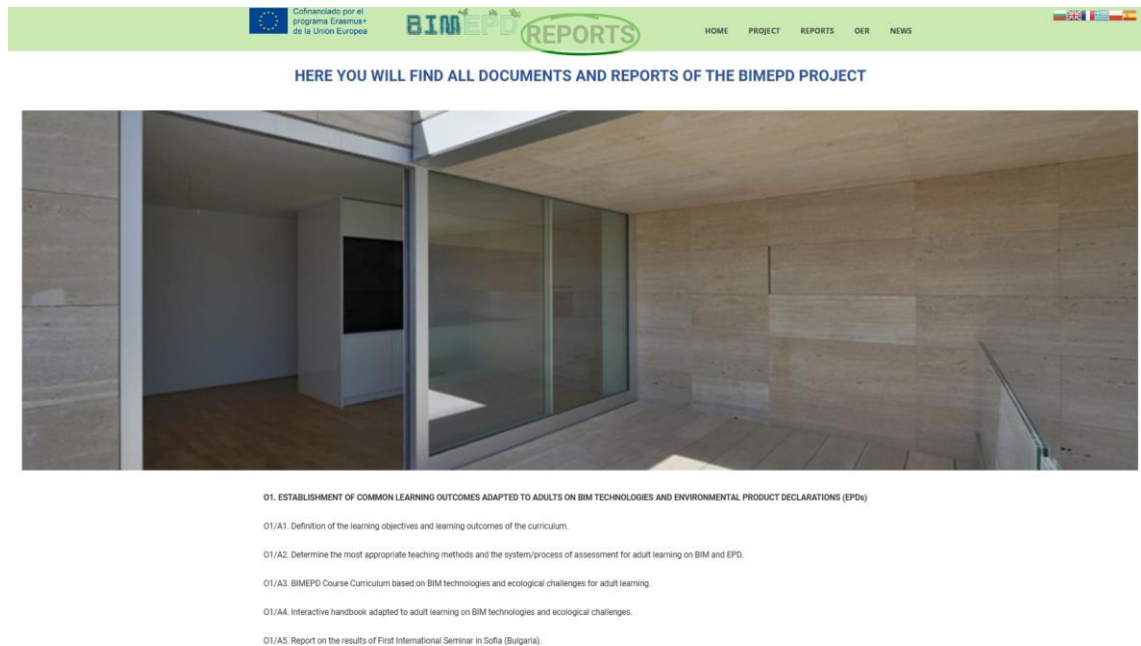
OBJECTIVES

The BIMEPD project is, in its nature, the production and development of multimedia materials based on BIM and taking into account challenges related to LCA and EPDs of construction materials, to be used as training material for both adult education for professionals in the architecture sector, in order to satisfy a series of main objectives.

2.2.3. REPORTS

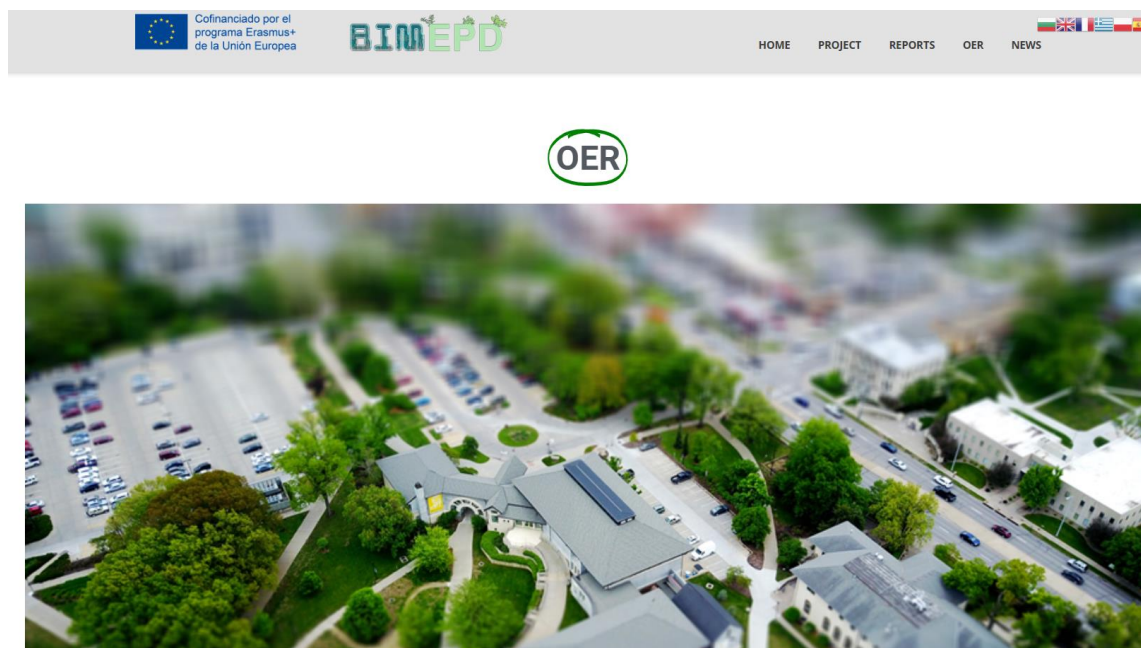
Link: <https://bimepd.eu/#reports>

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2.2.4. OER

Link: <https://bimepd.eu/oer/>



2.2.5. NEWS

Link: <https://bimepd.eu/news/>



The screenshot shows the BIMEPD website's news section. At the top, there is a header with the BIMEPD logo, a navigation menu (HOME, PROJECT, REPORTS, OER, NEWS), and a search bar. The main content area features three news articles:

- CELEBRADA LA REUNIÓN TÉCNICA DEL PROYECTO BIMEPD** (OCT 19, 2021): A meeting was held on October 14th at the Centro Tecnológico del Mármol, Piedra y Materiales.
- CONTINUÁN LOS AVANCES EN EL PROYECTO BIMEPD** (SEP 22, 2021): The project continues to work on integrating EPD into sustainable construction strategies.
- EL CTM ASISTE A LA REUNIÓN TÉCNICA DEL PROYECTO BIMEPD** (JUN 04, 2021): The CTM attended a meeting on May 26th coordinated by the Colegio Oficial de Arquitectos de la Región de Murcia.
- CELEBRADA LA PRIMERA REUNIÓN TRANSNACIONAL DEL PROYECTO BIMEPD DEL** (JUN 04, 2021): The first transnational meeting of the project was held.

On the right side, there are sections for 'Recent Posts' and 'Recent Comments'. The 'Recent Posts' section lists three posts with their dates. The 'Recent Comments' section shows 'No comments added yet.' Below these, there is an 'Archives' section with a list of months: October 2021, September 2021, and June 2021.

3. BIMEPD OPEN EDUCATIONAL RESOURCE (OER)

This Open Educational Resource was designed and produced to support the implementation of the BIMEPD Course. It is available for free on the project website for being used as a supporting material.

The BIMEPD OER is considered as one of the core tasks of the project and therefore need the special attention in its correct development and design. For that reason, CTM was the developer of this OER counting with the support and contribution of rest of partners.

3.1. PRESENTATION OF THE BIMEPD OER

The OER of the BIMEPD project is available in the link: <https://bimepd.eu/oer/>

In order for this Open Educational Resource to contain all the information and contents of the project in an orderly and intuitive way for consultation, it was decided to divide it into as many sections as it contained different contents.

The different sections created were:

In this open-access platform, you can access all the information collected during and beyond the end of the project. The platform provides more information for self-learning educational.

DIRECT ACCESS

COURSE ACCESS

Project code 2020-1-ES01-KA204-083128



3.1.1. DIRECT ACCESS

Within the Direct access section, we can find 3 sub-sections:

- **Regulations** (<https://bimepd.eu/oer/regulations/>). This sub-section contains the documents that contain regulations related to the project's subject matter, be it BIM and environment in construction.















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HOME PROJECT REPORTS OER NEWS

REGULATIONS

Name and description	Language available	Date
French BIM regulations	 	2021/02/16
French regulations regarding Building Information Modelling (BIM)		
Polish BIM regulations	 	2021/02/16
Polish regulations regarding Building Information Modelling (BIM)		
Spanish BIM regulations	 	2021/02/16
Spanish regulations regarding Building Information Modelling (BIM)		
Bulgarian environment regulations	 	2021/02/16
Bulgarian regulations regarding environment in construction		
French environment regulations	 	2021/02/16
French regulations regarding environment in construction		
Polish environment regulations	 	2021/02/16
Polish regulations regarding environment in construction		
Spanish environment regulations	 	2021/02/16
Spanish regulations regarding environment in construction		

DIRECT ACCESS

- [REGULATIONS](#)
- [TECHNICAL DOCUMENTS](#)
- [DISSEMINATION](#)




- **Technical documents** (<https://bimepd.eu/oer/technical-documents/>). In this sub-section we can find the reports of the different tasks of the BIMEPD project.


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HOME PROJECT REPORTS OER NEWS

TECHNICAL DOCUMENTS

Name and description	Language available	Date
1.1. Learning outcomes		2021/10/20
Definition of the learning objectives and learning outcomes of the curriculum.		
1.2. Teaching methods		2021/10/20
Determine the most appropriate teaching methods and the system/process of assessment for adult learning on BIM and EPD.		
1.3. Course curriculum		2021/10/20
BIMEPD Course Curriculum based on BIM technologies and ecological challenges for adult learning.		

DIRECT ACCESS

- [REGULATIONS](#)
- [TECHNICAL DOCUMENTS](#)
- [DISSEMINATION](#)

- **Dissemination** (<https://bimepd.eu/oer/dissemination/>). In this last sub-section, you can view part of the dissemination of the BIMEPD project, as well as the presentations given at seminars.

3.1.2. MOOC

The MOOC (Massive Open Online Course), hosted by the OER (<https://class.bimepd.eu/>), supports teachers and learners in the delivery of courses. It is a flexible learning modality as participants can access it from anywhere and at any time.

This MOOC has six courses, one in each of the project partners' languages (Spanish, Greek, Polish, Bulgarian and French) and in English. All of them can be accessed free of charge by registering so that the course will be supervised when a considerable number of students are gathered, or they can also be accessed free of charge, with the username and password shown below.



Register For Our Free Courses!



If you do not want to register for our regular courses supervised by a teacher and you only want to view the contents, please log in with the following credentials:

User: studentzero

Password: BimEpd_22



BIMEPD:
PROGRAMA DE
FORMACIÓN
SENIOR SOBRE
METODOLOGÍAS
PARA LA
INTEGRACIÓN DE
EPD EN
ESTRATEGIAS DE
CONSTRUCCIÓN

BIMEPD:
АДАПТИРАНА
ПРОГРАМА ЗА
ОБУЧЕНИЕ НА
ВИСИСТИ ПО
МЕТОДОЛОГИИ НА
BIM ЗА
ИНТЕГРИРАНЕ НА
EPD В
СТРАТЕГИИТЕ ЗА

BIMEPD:
DOSTOSOWANY
PROGRAM
SZKOLENIA DLA
SENIORÓW W
ZAKRESIE
METODOLOGII BIM
W CELU
WŁĄCZENIA EPD
DO STRATEGII

BIMEPD:
ΠΡΟΣΑΡΜΟΣΜΕΝΟ
ΠΡΟΓΡΑΜΜΑ
ΚΑΤΑΡΤΙΣΗΣ
ΑΝΩΤΕΡΩΝ
ΣΤΕΛΕΧΩΝ ΣΤΙΣ
ΜΕΘΟΔΟΛΟΓΙΕΣ
BIM ΓΙΑ ΤΗΝ
ΕΝΣΩΜΑΤΩΣΗ ΤΩΝ
EPD ΣΤΙΣ


BIMEPD :
PROGRAMME DE
FORMATION
SENIOR ADAPTÉ
SUR LES
MÉTHODOLOGIES
BIM POUR
L'INTÉGRATION DE
L'EPD DANS LES
STRATÉGIES DE

Once a significant number of people have registered, the course will start under the supervision of a teacher.



By accessing the programme "ADAPTED SENIOR TRAINING PROGRAM ON BIM METHODOLOGIES FOR THE INTEGRATION OF EPD IN SUSTAINABLE CONSTRUCTION STRATEGIES" in each of the languages we can see the materials created in the project, as well as complementary material (regulations, videos and related articles, etc.) for the expansion of users' knowledge.



Users can work their way through the programme by reading the topics and playing the accompanying videos.


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ENGLISH (EN)  







BIMEPD Project




ADAPTED SENIOR TRAINING PROGRAM ON BIM METHODOLOGIES FOR THE INTEGRATION OF EPD IN SUSTAINABLE CONSTRUCTION STRATEGIES


Dashboard / Courses / BIMEPD_EN Turn editing off



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GENERAL 

  Announcements 

Edit 

Edit  

 Add an activity or resource

TASK 03/A1. IT production of BIMEPD Open Educational Resource.

+
Edit ▼

MODULE 1. BASIC CONCEPTS AND BIM (BUILDING INFORMATION MODELLING) TECHNOLOGY APPLIED TO LIFE CYCLE ANALYSIS (LCA)

+

📄
Presentation of the module 1. ✎

Mark as done

Edit ▼

+

📄
Video 1. BIM methodology- Future building ✎

Mark as done

Edit ▼

+

📄
Video 2. What is BIM (Building Information Modeling)? ✎

Mark as done

Edit ▼

+

📄
Video 3. Life cycle assessment (LCA)- Introduction (part 1) ✎

Mark as done

Edit ▼

+

📄
Video 4. Automated procedures for LCA analysis on a BIM project - Orjola Brahल्ली ✎

Mark as done

Edit ▼

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📄
Video 5. BIM and LCA: greenBIM ✎

Mark as done

Edit ▼

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📄
Article I. Promoting Sustainability through Investment in Building Information Modeling (BIM) Technologies: A Design Company Perspective ✎

Mark as done

Edit ▼

TASK 03/A1. IT production of BIMEPD Open Educational Resource.

+

Edit ▾

MODULE 2. BIM AND LCA REGULATION. ✎

+

Presentation of the module 2. ✎

Edit ▾

Mark as done

+

Video 1. Life Cycle Assessment and Ecolabelling towards Circular Economy ✎

Edit ▾

Mark as done

+

Video 2. BIM Adoption in Europe: Current State, Challenges and a Vision of Tomorrow. ✎

Edit ▾

Mark as done

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Article I. BIM and LCA Integration: A Systematic Literature Review. ✎

Edit ▾

Mark as done

+

Article II. Building Information Modelling (BIM) standardization. ✎

Edit ▾

Mark as done

+

Add an activity or resource

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Edit ▾

MODULE 3. SEARCH AND INTERPRETATION OF EPD DATABASES. ✎

+

Presentation of the module 3. ✎

Edit ▾

Mark as done

+

Video 1. Eco labeling ✎

Edit ▾

Mark as done

+

Video 2. Why an EPD database is better than generic LCA data ✎

Edit ▾

Mark as done

+

Video 3. What is an EPD? (Environmental Product Declaration in Detail) ✎

Edit ▾

Mark as done

+

Add an activity or resource

Consortium members: Colegio Oficial de arquitectos de la Región de Murcia (COAMU), Asociación Empresarial de Investigación Centro Tecnológico del Mármol, Piedra y Materiales (CTM), Institute Entrepreneurship Development (IED), Asociația Bulgaria Green Building Council (BGBC), Warsaw University of Technology (WUT), CYPE France

15

TASK 03/A1. IT production of BIMEPD Open Educational Resource.

+
Edit ▾

MODULE 4. BIM OBJECT MODELLING AT DEVELOPMENT LEVEL 600 (LOD600) FOR THE INTEGRATION OF ENVIRONMENTAL IMPACT DATA

+

📄
Presentation of the module 4.

Mark as done

Edit ▾

+

📄
Video 1. LOD in BIM || Level of Development || Level of Detailing || Must watch

Mark as done

Edit ▾

+

📄
Video 2. BIM Level of Development Explained LOD 100 200 300 350 400 500 Video

Mark as done

Edit ▾

+

📄
Article 1. Environmental benchmarking of building typologies through BIM-based combinatorial case studies

Mark as done

Edit ▾

+ Add an activity or resource

+
Edit ▾

MODULE 5. MODELLING OF SUSTAINABLE BUILDINGS (NEW CONSTRUCTION AND RENOVATION) BASED ON LIFE CYCLE ASSESSMENT

+

📄
Presentation of the module 5.

Mark as done

Edit ▾

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📄
Video 1. Building environmental certification systems

Mark as done

Edit ▾

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📄
Video 2. BIM in Sustainable High Performance Buildings Design

Mark as done

Edit ▾

+

📄
Article 1. LCA BENCHMARKS IN BUILDING'S ENVIRONMENTAL CERTIFICATION SYSTEMS

Mark as done

Edit ▾

+ Add an activity or resource

TASK 03/A1. IT production of BIMEPD Open Educational Resource.

+

Edit ▾

MODULE 6. ENVIRONMENTAL MANAGEMENT AND DOCUMENTATION OF A BIM PROJECT. ✎

+

Presentation of the module 6. ✎

Edit ▾

Mark as done

+

Video 1. Construction industry & Circular Economy ✎

Edit ▾

Mark as done

+

Video 2. How the construction industry can apply circular economy principles ✎

Edit ▾

Mark as done

+

Video 3. Collection and recycling of construction and demolition waste ✎

Edit ▾

Mark as done

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Article 1.Circular economy in the building and construction sector: A scientific evolution analysis ✎

Edit ▾

Mark as done

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Article 2. An overview of the waste hierarchy framework for analyzing the circularity in construction and demolition waste management in Europe ✎

Edit ▾

Mark as done

+

 Add an activity or resource

TASK 03/A1. IT production of BIMEPD Open Educational Resource.

+
Edit ▼

MODULE 7. INITIATION AND DEVELOPMENT OF A PROJECT WITH BIM TECHNOLOGY THROUGH A STRATEGY OF ENVIRONMENTAL IMPACT REDUCTION. ✎

+

📄
Presentation of the module 7. ✎

Mark as done

Edit ▼

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📄
Video 1. BIM methodology- Future building ✎

Mark as done

Edit ▼

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📄
Video 2. What are environmental indicators? ✎

Mark as done

Edit ▼

+

📄
Video 3. BIM and GIS: An Introduction ✎

Mark as done

Edit ▼

+ Add an activity or resource

+
Edit ▼

MODULE 8. METHODOLOGIES FOR CALCULATING ENVIRONMENTAL IMPACT FROM BIM OBJECTS WITH LOD600 DEVELOPMENT LEVEL. ✎

+

📄
Presentation of the module 8. ✎

Mark as done

Edit ▼

+

📄
BIMClay Project Youtube Channel. ✎

Mark as done

Edit ▼

+

📄
BIMstone Project YouTube Channel. ✎

Mark as done

Edit ▼

+ Add an activity or resource

TASK 03/A1. IT production of BIMEPD Open Educational Resource.

+

Edit ▾

MODULE 9. OTHER METHODOLOGIES OF ENVIRONMENTAL IMPACT CALCULATION FROM OPEN BIM FORMATS. ✎

+

📄

Presentation of the module 9. ✎

Edit ▾

Mark as done

+

📄

BIMhealthy website ✎

Edit ▾

Mark as done

+

📄

UrbanBIM website ✎

Edit ▾

Mark as done

+

📄

CircularBIM website ✎

Edit ▾

Mark as done

+

Add an activity or resource

+

Edit ▾

MODULE 10. THE CONSTRUCTION MANAGER: BIM ENVIRONMENTAL MANAGER. ✎

+

📄

Presentation of the module 10. ✎

Edit ▾

Mark as done

+

📄

Video 1. BIM for Project Managers ✎

Edit ▾

Mark as done

+

📄

Video 2. Construction and Demolition Waste Disposal and Recycling System ✎

Edit ▾

Mark as done


+

Add an activity or resource

At the end of the course, students are given an evaluation questionnaire which they must pass in order to successfully complete their training.

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EXTRA CONTENTS

 BIMEPD evaluation



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ENGLISH (EN)  



BIMEPD Project

ADAPTED SENIOR TRAINING PROGRAM ON BIM METHODOLOGIES FOR THE INTEGRATION OF EPD IN SUSTAINABLE CONSTRUCTION STRATEGIES

Dashboard / Courses / BIMEPD_EN / EXTRA CONTENTS / BIMEPD evaluation

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 - > MODULE 3. Search and interpretation of EPD databases.

BIMEPD evaluation

Time limit: 15 mins

Grading method: Highest grade

Grade to pass: 5.00 out of 10.00

[Attempt quiz now](#)

◀ Video 2. Construction and Demolition Waste Disposal and Recycling System

Jump to...