This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101033864

BUILD UP
The European portal for energy efficiency and renewable energy in buildings

WEBINAR
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101033864.

ARISE e-learning platform on BIM and applied energy efficiency tools

A webinar for trainees

17th January 2024
11:00 - 12:00 (CET)
11:00  Presentation of BUILD UP, Introduction to webinar topic and agenda

    BUILD UP team member

11:05  Audience interaction with Sli.do

    Larissa De Rosso, ARISE partner and Project Officer at the Architects’ Council of Europe (ACE)

11:10  Digitalization to the Built environment – ARISE approach.

    Andrew Hamilton, ARISE partner and Curriculum Area Manager Construction & The Built Environment Belfast Metropolitan College
11:20  How does ARISE e-learning platform work? Which content is available on the platform?
Ryan Dempsey, ARISE partner and Researcher at TUDublin

11:35  ARISE offers
Anna Moreno, ARISE partner and Responsible for the international affairs
BuildingSmart Italy - IBIMI

11:50  Questions and Answers with Sli.do
Larissa De Rosso, ARISE partner and Project Officer at the Architects’ Council of Europe (ACE)

11:58  Thank you from BUILD UP
BUILD UP team member
Audience interaction with Sli.do

Larissa De Rosso
ARISE partner and Project Officer at the Architects’ Council of Europe (ACE)
Join at slido.com
#ARISEtrainees

Click Present with Slido or install our Chrome extension to display joining instructions for participants while presenting.
Where are you now?

1. Click Present with Slido or install our Chrome extension to activate this poll while presenting.
Please indicate the type of your organisation(s) - max 2

① Click Present with Slido or install our Chrome extension to activate this poll while presenting.
How did you find out about this webinar?

1. Click Present with Slido or install our Chrome extension to activate this poll while presenting.
Digitalization to the Built environment - ARISE approach.

Andrew Hamilton
ARISE partner and Curriculum Area Manager Construction & The Built Environment Belfast Metropolitan College
Raising the awareness of the potential in delivery and content to both the SMEs and individuals.

What shape is digital transformation in the built environment?

Labour shortages and how to address them.
....with support

Bite size micro modules- enables a stepped, assisted progression, with achievable goalposts.
Transformation

Mapping out and enabling the pathway to transformation

What does the future interface of training and upskilling in the construction sector look like?

How can we deliver effective task and impact-based learning in the construction sector?
BIM Basics

BIM Support

BIM Utilisation

BIM Application

**Content Framework Groups**

Energy Efficiency competence embedded into the contents of each area/group

Enables for a "ground-up" stepped progression and continuous upskilling

Energy efficiency related BIM Competences incorporated into contents
### Content Framework - Specialisms

Organically embedded within the 3 categories:

- BIM basics
- BIM Utilisation
- BIM Application

But specialism can be undertaken separately, in case previous specialism are already mastered, or partially not required for the learner's professional role and activity.

<table>
<thead>
<tr>
<th>Specialism</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Data Management in BIM</td>
<td>BB-1</td>
</tr>
<tr>
<td>System Administration for BIM</td>
<td>BS-1</td>
</tr>
<tr>
<td>BIM data Capturing and Representing</td>
<td>BU-1</td>
</tr>
<tr>
<td>BIM Planning and Conceptualizing</td>
<td>BU-2</td>
</tr>
<tr>
<td>BIM Simulating and Quantifying</td>
<td>BU-3</td>
</tr>
<tr>
<td>BIM for Prefabricating and Assembling</td>
<td>BU-4</td>
</tr>
<tr>
<td>BIM for Operating and Maintaining</td>
<td>BU-5</td>
</tr>
<tr>
<td>BIM for Monitoring and Controlling</td>
<td>BU-6</td>
</tr>
<tr>
<td>BIM for Controlling and Extending</td>
<td>BU-7</td>
</tr>
<tr>
<td>BIM Management</td>
<td>BA-1</td>
</tr>
<tr>
<td>BIM Project Management</td>
<td>BA-2</td>
</tr>
<tr>
<td>BIM Coordination</td>
<td>BA-3</td>
</tr>
<tr>
<td>BIM Modelling</td>
<td>BA-4</td>
</tr>
<tr>
<td>BIM Engineering</td>
<td>BA-5</td>
</tr>
<tr>
<td>BIM Programming</td>
<td>BA-6</td>
</tr>
<tr>
<td>Energy Efficiency with BIM Basics</td>
<td>BE-0</td>
</tr>
<tr>
<td>Energy Efficiency with BIM Utilisation</td>
<td>BE-1</td>
</tr>
<tr>
<td>Energy Efficiency with BIM Application</td>
<td>BE-2</td>
</tr>
</tbody>
</table>
Developing the digital interface and tools necessary to implement the digitalisation journey

When should the built environment start the digital transformation process?

Understanding and achieving the sustainable benefits deriving from digitalisation
Several bespoke “Entry points”
To cater different levels of prior knowledge and/or subjects of interest

Personalise the individual training Pathway to better match specific needs and requirements of each EAC professional, at a particular moment of their career.
## Content Framework - Task based

<table>
<thead>
<tr>
<th>BA-3</th>
<th>BIM Coordination</th>
<th>BA-3.1</th>
<th>Contribute on BIM Execution Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>BA-3.1.1  Perform quality checks on the contract</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>BA-3.1.2  Compile (federated) building model, based on aspect or discipline models</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>BA-3.2  Organise checking of models,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>BA-3.2.1  Organise clash control sessions</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>BA-3.2.2  Check (federated) building model, based on</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>BA-3.2.3  Manage clash control distribution and follow-up</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>BA-3.3  Manage BIM coordination process</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>BA-3.3.1  Propose changes and check execution of</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>BA-3.3.2  Direct project team members on data and</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>BA-3.3.3  Make use of appropriate tools</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>BA-3.3.4  Signal risks and bottlenecks</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>BA-3.4  Energy Efficiency for BIM</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>BA-3.4.1  Organise checking on EE specific topics</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>BA-3.4.2  Manage BEM coordination process</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>AR, PM, BO, FO</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>21, 21a, 21b,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>22, 22a, 22b,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>81,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>82,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>83,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>84,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>85,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>86,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>25,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>75,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>88,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>27,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9b,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>89,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>AR, PM,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>AR, PM,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>AR, PM,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>AR, PM,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>AR,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>AR,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>AR,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>AR,</td>
</tr>
</tbody>
</table>

**Sub-tasks**

**ULO**

**Associated professions**
Content- Framework- Task based

Required tasks & subtasks + ULO’s = Tasks executed in correct manner by the right competent professional

Competence + Skills + Knowledge = Unit Learning Outcome (ULO)
Progression & Gamification

Gain XPs and stair and raise your profile

Choose your own learning pathway

Complete modules and earn digital certifications
How does ARISE e-learning platform work?
Which content is available in the platform?

Ryan Dempsey
ARISE partner and Researcher at TU Dublin
The Arise Platform - access

ARISE’s global goal is to revolutionize the learning process by changing both delivery and recognition of sustainable energy skills in the construction sector.

The new system of training and recognition of skills will be valid across the EU, thus increasing the spread of skilled workforce in the building market.

RELEVANT - INNOVATIVE - SCALABLE - SECURE

https://ariseplatform.eu/
The Arise Platform - Register/Create account

LOG IN TRAINEE

Log in to access Arise training courses and modules. Get ready to push your learning path towards BIM excellence and actively engage an extensive BIM certification process.

Username

Password

Lost password?

Create new account

TRAINING PLATFORM FOR THE DIGITAL CONSTRUCTION

Arise platform was created to answer to several challenges that are the result of a very dynamic and competitive economic environment that requires companies to readily and continuously adapt to stay abreast of competition and so, the workforce needs to acquire an increasing amount and variety of skills, in a shorter time span.

https://ariseplatform.eu/
The Arise Platform - Register/Create profile

Please fill in all the following fields:

- Username
- Password
- Email address
- Email (public)
- First name
- Last name
- Select a country
- Company
- What is your gender?
- Please provide your phone number
- What country do you work in?
- What is the name of your company?
- What is your job title? (optional)
- What are your training qualifications?
- What is your field of study?
- How many businesses do you work for per year?
- What type of construction business does your company work in?
- What is the size of your organisation?
The Arise Platform - Selecting training
The Arise Platform- Selecting training

COURSE LIST | MODULES

BIM TERMS & DEFINITIONS INTRO
Implementing BIM: This course teaches you the basics of BIM and how to use it effectively.

BIM DIMENSIONS INTRO
What is BIM? This course will teach you about BIM and its applications in architecture.

OVERVIEW OF BIM BENEFITS INTRO
Overview of benefits that BIM offers, including improved project efficiency.

BIM TOOLS FOR ENERGY EFFICIENCY INTRO
Learn about tools that can help reduce energy consumption.

DEVISE BIM STRATEGY
Learn how to devise a BIM strategy for your project.

MANAGE ORGANISATIONAL BIM
Organisational BIM management strategies.

https://ariseplatform.eu/
The Arise Platform - Access / Enrolling

BIM TERMS & DEFINITIONS - INTRO
Implementing BIM? Then, knowledge of some essential terms is essential. Get past the jargon and learn some of the basic important terms to allow progress in your BIM journey.

30 MINUTES

OBJECTIVE
Scared of BIM jargon? Don't be! Learn the basic terms here and we'll help know where to find information about the rest.

ENROLL ON MODULE

30 XPERIENCE POINTS

BIM BASICS
The micro-training plan enables learners to develop a fundamental understanding of Building Information Modelling (BIM) and associated workflows.

ENROLL ON TRAINING PLAN

COURSE LIST | TRAINING PLANS

Modules Included:
- BIM Dimensions - Intro
- Overview of BIM Benefits - Intro
- BIM Terms & Definitions - Intro
Bite size approach – Modules and Plans

Taking on several Micro Modules can lead to more “defined”, complex and complete training pathways (units, courses, Diplomas) – the Training Plans
Several training plans share some common modules.

Once a module is completed—either individually as stand alone, or as part of a training plan—

It becomes “bankable”

Able to be recognised and “re-usable” for other training plans when time suits.
The Arise Platform- Learning tools

ARISE platform allow deployment of different tools and teaching methods to cater for different learning styles.

Promoting better learning experiences
The Arise Platform

1. Introduction - What is BIM?

Building Information Modelling (BIM) has become an established workflow for the Architecture Engineering and Construction (AEC) sector around the world. Within Europe several Governments have embraced the use of BIM and highlight its use as core to challenging existing industry business model and practices, driving greater collaboration, efficiency, innovation and value across the sector.

- BIM is seen as key to helping the construction industry
- Boost delivery and operational efficiency
- Reduce cost and improve value
- Lower the carbon footprint
- Improve collaboration across the supply chain improve quality of customer outcomes

Shortbook Lesson Example

Assessment Method Example - Test Quiz
Enables for a "ground-up" stepped progression and continuous upskilling.

Energy Efficiency competence embedded into the contents of each area/group.

Energy efficiency related BIM Competences incorporated into contents.
The Arise Platform - Content - Framework

COURSE LIST | MODULES

BIM TERMS & DEFINITIONS INTO
- Implemented by BIM Thes.
- Knowledge of basic concepts that form a basis for successful implementation
- A good starting point for new BIM users

BIM DIMENSIONS - INTO
- What are BIM dimensions?
- The role of BIM in design, construction, and operation
- Benefits of using BIM

OVERVIEW OF BIM BENEFITS INTO
- An overview of the benefits of using BIM in construction and maintenance
- Understanding the full lifecycle of a building

BIM TOOLS FOR ENERGY EFFICIENCY INTO
- Learners will be able to develop an understanding of how BIM can be used to reduce energy costs

SECURE ACQUIRED BIM KNOWLEDGE COMING SOON
- Content will be updated to incorporate new knowledge and best practices

DEVELOP PROJECT STRATEGIES FOR CMIS COMING SOON
- Learners will be able to develop project strategies for CMIS

COLLABORATIVE BIM TOOLS FOR COMING SOON
- The learning will be updated to include new tools and techniques

COURSE LIST | TRAINING PLANS

BIM BASICS
- The micro training plan enables learners to develop a fundamental understanding of Building Information Modelling (BIM) and associated workflows

IMPLEMENTING A BIM STRATEGY COMING SOON
- The micro training plan provides an understanding of how to successfully implement a BIM strategy

BIM & DIGITISATION TOOLS FOR ENERGY EFFICIENCY COMING SOON
- The micro training plan provides an understanding of how to use BIM tools to help achieve energy efficiency

34
The Arise Platform - Content - Examples

Understand the context of and essentials of BIM, especially focused on:
- What is BIM
- What and whom it involves
- Key terms and definitions within BIM
- Its context in the wider digitalisation of the AEC Industry
- BIM’s role as an enabler for energy efficiency

Module’s methodologies, delivery tools, materials and assessment methods

- Web-Based Lecture (WBL), Instructor-Led Tutoring (ITL), Scaffolding, Guided Self-Study (GSL)
- Material can be presented in:
  - live lecture and recorded as a narrative videos
  - Short Book created to support presentation content
  - Multiple choice quiz used for assessment

EXAMPLE: - BIM Basics

Understand what BIM involves, including why/how it encompasses all of the construction supply chain and built asset/project lifecycle. BIM as part of a wider revolution-digitalisation of the AEC industry and
The Arise Platform - Content - Example

Overview of the main concepts related to the use of energy in buildings.

Module's methodologies, delivery tools, materials and assessment methods

The methodologies, delivery tools, materials and assessment methods for this module can consist of the following:

- Guided Self-Study (GSL), Blended / Online Learning
- Coursebook, Presentation, Bibliography / Links
- User’s supplied with links to external supporting resources to assist self-guided learning and for independent progress.
- Assessment method: multiple choice quizzes
The Arise Platform—Use it

TRAINING & TRAINDERS
First step to possibly become a BIMcert Trainer, and/or influence upskilling of the AEC Industry. Are you a Trainer or AEC Professional involved in upskilling in BIM & Digital construction, energy efficiency and

XP 0 0 0

BIM READY
A FREE self-study guide in online/offline format, to introduce you to BIM and to get you on track to be ready to give first steps into BIMcert upskilling and for using BIM within your professional role. Will indicate

XP 15 0 0

WHAT IS BIM & DIGITAL CONSTRUCTION?
Understand what BIM involves, including why/how it encompasses all of the construction supply chain and built asset/project lifecycle. BIM as part of a wider revolution—digitalisation of the AEC industry and

XP 10 3 1

BIM TERMS & DEFINITIONS
Implementing BIM? Then, knowledge of some essential key terms is essential! Get past the jargon and learn some of the basic important terms to allow progress in your BIM journey.

XP 0 0 0

WHAT ARE BIM (MATURITY) LEVELS?
Ever heard of BIM Maturity levels? Not sure what they are, what it means and what it involves? This FREE short micro training unit is just what you need to get up to speed! We will break it all down.

XP 0 0 0

BIM DIMENSIONS
What are BIM Dimensions? You probably already heard about BIM levels or stages, but what about these Dimensions? Learn how many are there, what do they mean and how they apply into your role and

XP 0 0 0
The Arise Platform- Have your say

HELP ARISE SHAPE THE FUTURE OF THE INDUSTRY.
BE PART OF OUR FOCUS GROUP
HAVE ACTIVE INFLUENCE IN YOUR UPSKILLING OPTION / SKILLS RECOGNITION.
MAKE ARISE EVEN MORE RELEVANT TO YOU
HELP US IMPROVE FURTHER
ARISE offers

Anna Moreno
ARISE partner and Responsible for the international affairs BuildingSmart Italy - IBIMI

The ARISE platform can be used to increase both the demand and the offer of new competences
ARISE for the Public administration

Public administration could better understand the use of BIM to manage the requirements for open BIM in public procurement
Small enterprises could learn how to use BIM to better collaborate and integrate within the supply chain. They will learn step-by-step and will support upskilling their workers with bite size learning materials.
ARISE for students

Students could enrich their curriculum by certifying their competences
ARISE for technology producers

Producers of technology could teach designers and installers to better use their technology
ARISE for employers

The employers could identify the tasks their employees need to perform and address them to the right training path.
ARISE for trainers

The trainers could use the ARISE platform as a learning materials database to tailor the courses for specific users’ classes.
What will be the most important target?

Click Present with Slido or install our Chrome extension to activate this poll while presenting.
Questions and Answers with Sli.do

Larissa De Rosso
ARISE partner and Project Officer at the Architects’ Council of Europe (ACE)
Audience Q&A Session

Click Present with Slido or install our Chrome extension to show live Q&A while presenting.
Thank you from BUILD UP

BUILD UP team member
This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 101033864

This material has been provided by:

Partners
Thank you!

This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 101033864