



5th CitA BIM Gathering Virtual Conference
21 - 23 September 2021



Delivering Green, Energy and Digital Skills for Ireland

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Flexible and Work Based Learning, LIT



10 Years of Skills Experience



www.lit.ie/rdi

The Problem

Rapid Changes across the sector

- Planning and Building Regulations
- Climate action
- Digitisation
- Fragmentation (HE, FE, Private)
- Lack of drivers to take up training
- Resources: People & Places
- Innovation & Evolution in Higher Education

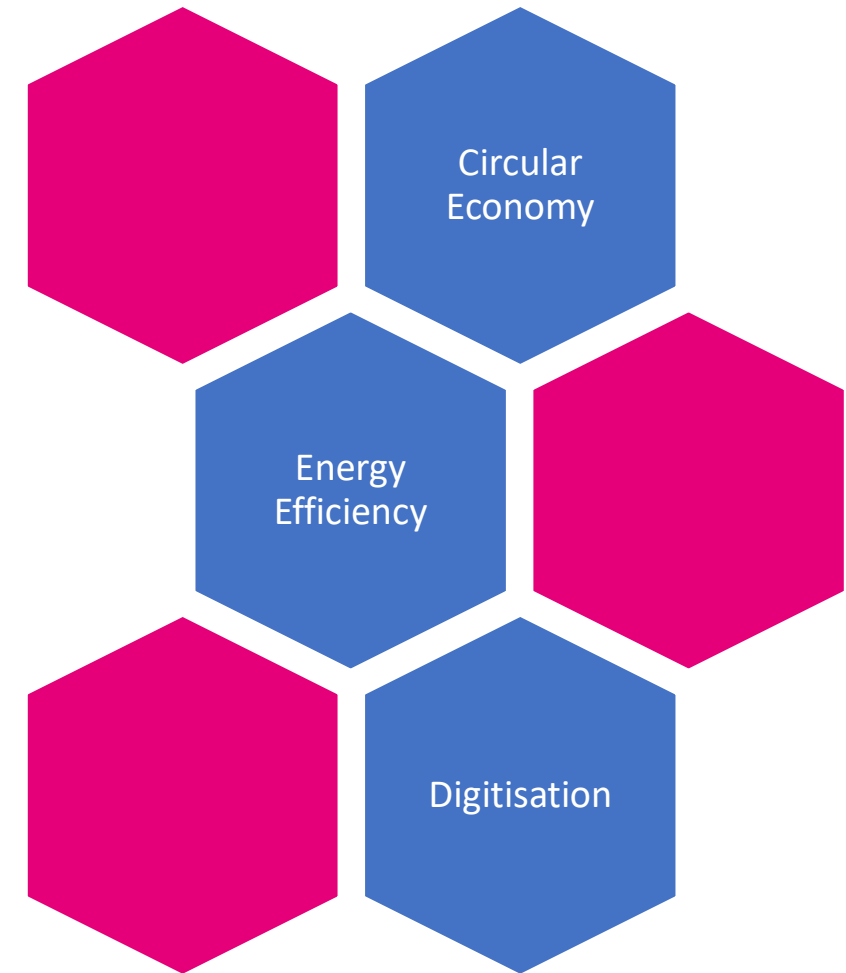


<https://pixabay.com/illustrations/question-mark-important-sign-1872665/>

DASBE

A Hub for provision of upskilling, capacity building and education in the building sector on green construction, circular economy and digital skills

- Low energy buildings to Virtual Reality/Living Labs
- Rapid Design, Development and Deployment
- On-line, virtual, blended and face to face approaches
- Digital Platform enabling access to Micro Credentials through to Major Awards
- Connecting R & D with Education and Training
- Connecting Industry demand with Local Provision

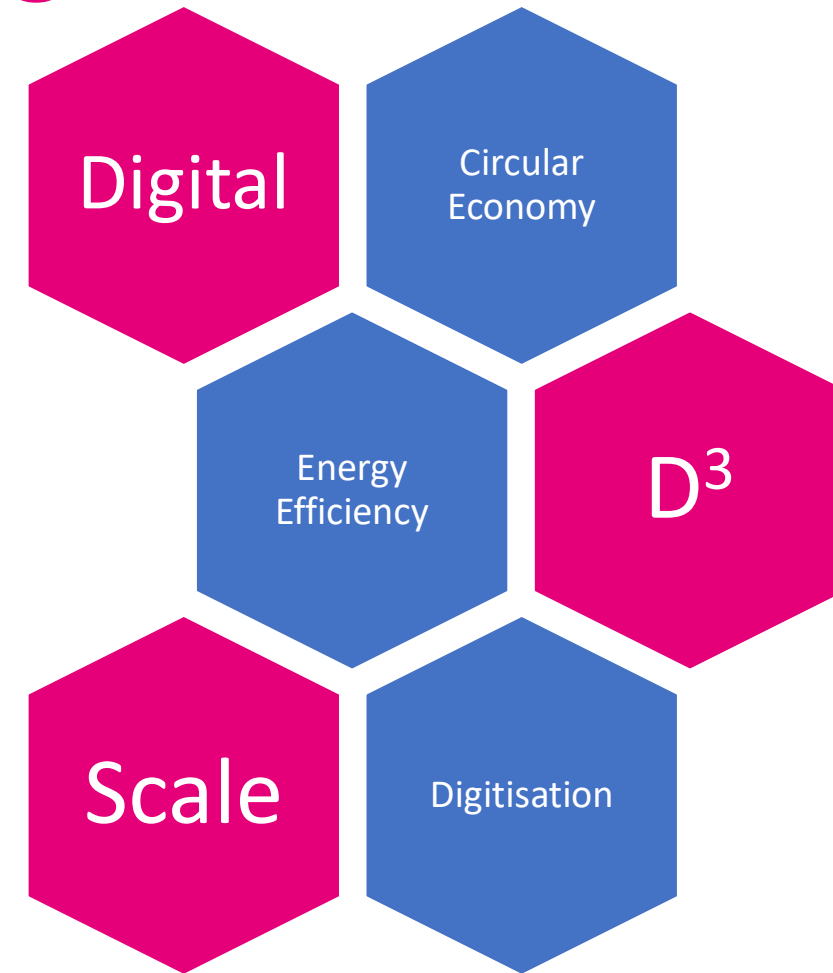


DASBE – Aims & Objectives

DASBE seeks to create a **National Digital Academy** that enables the Construction Industry, SMEs, Manufacturers and Workers to upskill and gain new knowledge in a cost effective, worker centric learning environment.

Objectives

- To host On-line and Blended Learning programmes in relevant fields. This will grow to over 40 programmes engaging a minimum of 2,000 learners by 2025
- Create a Programme Design, Development and Deployment model (D3) which will enable rapid response to market needs in response to technology, policy and industry needs
- Expand the DASBE Consortium to include a minimum of 5 Enterprises and 5 Higher/Vocational Institutes by 2024, thus ensuring sustainability of the initiative.
- Develop a robust strategic and business plan, by 2024, for the growth and continuation of DASBE.



Target Groups

Construction Professionals

- Need: Continuous CPD
- Response: Existing and New Programmes at Level 8/9 in blended/on-line
- Benefits: Best practice design & development of sustainable solutions

Crafts workers

- Need: New skills/knowledge
- Response: Existing/New Programmes at Levels 6/7/8.
- Benefits: Sustainable employment within changing environment

New Talent

- Need: Attracting students into the construction sector.
- Response: Innovative programmes showcasing industry response
- Benefits: Increased profile of construction as a career and a sustainable supply of high calibre graduates.

Target Groups

- **Construction Professions e.g. site managers, engineers, architects, project managers (in both the private and public sector)**
 - Need: Continuous CPD on key technologies, policies, solutions and methods within the sector, particular focus on low carbon buildings and heating technologies.
 - Response: Existing and New Programmes at Level 8/9 in blended/on-line format addressing technical, financial and management knowledge gaps
 - Benefits: Cost effective design of new and retrofitted buildings, integrated best practice – including circularity, appropriate technology and using new financial solutions.
- **Attracting talent to the Construction Professions**
 - Need: Attracting higher caliber students into the construction sector.
 - Response: The development and rollout of the innovative programmes
 - Benefits: Increased profile of construction as a career and a sustainable supply of high caliber graduates.

Target Groups

- **General Construction workers :**
 - Need: Require new skills and knowledge on nZEB, BIM, Circular and Green Economy.
 - Response: Rollout of existing and creation of new Programmes at Level 6 in blended/on-line formats address specific skills/knowledge gaps
 - Benefits: Enable them to maintain jobs in a rapidly changing sector, progression within career, higher quality building construction in line with new standards
- **Crafts workers e.g. plumbers, plasters, electricians**
 - Need: Require new skills, knowledge so that they can apply new technologies and solutions within the sector, create new work and business opportunities for themselves
 - Response: Existing and New Programmes at Levels 6/7/8 in blended/on-line formats addressing technical knowledge gaps and transversal skills/knowledge e.g. retrofit financing. New conversion programmes which are designed to facilitate accelerated upskilling of experienced craft workers ,
 - Benefits: Sustainable employment within changing environment, potential to respond to new business opportunities, new leaders in apprenticeship solutions

DASBE Ambition

A Digital Hub for provision of upskilling, capacity building and education in the building sector on green construction, circular economy and digital skills

Design,
Development &
Delivery

DASBE Platform

Programme
Development

VR/AR/Digital
Tools



Signposting

Hosting

Collating

Blended

On-Line

F2F

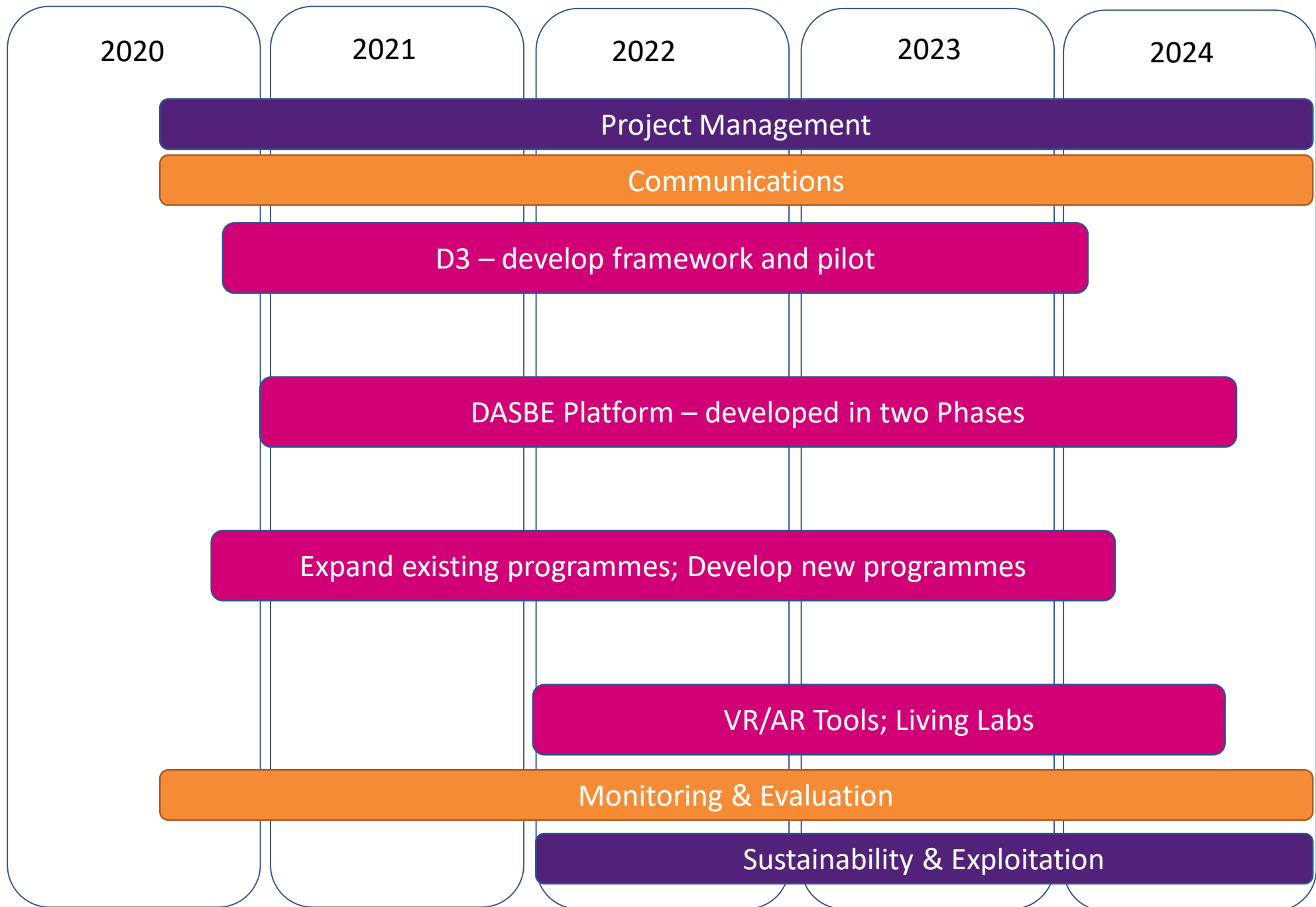
Major

Minor

SPA

2,000 Places

Sustainability & Exploitation



Current Activities

- Sept 2021 - Collating existing resources & assets
- Sept 2021 & Jan 2022 - Launching new programmes
- Oct 2021 - Launch of DASBE Video
- Nov 2021 - Horizon Scanning & Informing Programme Development Report
- Dec 2021 - Beta version of Platform and New Website
- Jan 2022 - VR/AR/Digital Tools
- Mar 2022 - Sustainability and Exploitation by Informing Policy



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Programme Activities

- Sept 2021 - Collating existing resources & assets
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- Dec 2021 - Beta version of Platform
- Jan 2022 - VR/AR/Digital Tools commencing
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New and Existing Programmes

Programme Name	HEI	Level	Status - Commencing	Category
Masters in Sustainable Energy System Management	LIT	9	Approved – Sept 21	Energy Efficiency
Certificate in Nearly Zero Energy Buildings	LIT	6	Approved – Sept 21	Energy Efficiency
M.Sc. in BIM and Digital Construction	GMIT	9	Approved – Sept 21	Digitisation
MEng in Energy Infrastructure	AIT	9	Approved – Sept 21	Energy Efficiency
Energy & Business Management	AIT	8	Approved – Sept 21	Energy Efficiency
Environmental Infrastructure	AIT	9	Approved – Sept 21	Circular Economy, Energy Efficiency
PGDip/MSc in Circular Economy and the Built Environment	GMIT	9	Approved – Sept 21	Circular Economy
Certificate in Fire safety	GMIT	9	Approved – Jan 22	Circular Economy, Energy Efficiency
Certificate/PGDip/MSc in Built Environment Regulations	GMIT	9	Approved – Jan 22	Circular Economy

In Development - Programmes

Programme Name	HEI	Level	Status - Commencing	Category
Virtual Design & Construction (VDC) Management	AIT	8	In Development – 2022	Digitalisation, Energy Efficiency
Digital Conservation of Historic Buildings	AIT	8	In Development – 2022	Digitalisation, Circular Economy, Energy Efficiency
Quality Information Management in the AEC Sector	AIT	8	In Development – 2022	Digitalisation, Circular Economy,
Construction Data Capture & Processing	AIT	8	In Development – 2022	Digitalisation
BEng (hons) Civil Engineering	AIT	8	In Development – 2022	Energy Efficiency
Postgraduate Diploma in BIM and Digital Construction	GMIT	9	In Development – 2022	Digitalisation, Circular Economy, Energy Efficiency
M.Sc. in BIM and Digital Construction	GMIT	9	In Development – 2022	Digitalisation, Circular Economy, Energy Efficiency
Postgraduate Certificate in SDGs for the Construction Sector	GMIT	7-9	In Development – 2022	Circular Economy,

In Development - Programmes

Programme Name	HEI	Level	Status - Commencing	Category
Building Services	LIT	8	In Development – 2022	Circular Economy, Energy Efficiency
Certificate in Community Energy	LIT	7	In Development – 2022	Circular Economy, Energy Efficiency
Certificate in Sustainable Energy Financing	LIT	7	In Development – 2022	Energy Efficiency, Circular Economy,
Higher Diploma in Retrofit Technology & Management	LIT	8	In Development – 2022	Digitalisation, Circular Economy, Energy Efficiency
Certificate in Fabric & Air-tightness for Retrofit	LIT	8	In Development – 2022	Circular Economy, Energy Efficiency
Certificate in M&E for Retrofit	LIT	8	In Development – 2022	Circular Economy, Energy Efficiency
Certificate in Retrofit Management	LIT	8	In Development – 2022	Digitalisation, Circular Economy, Energy Efficiency

Dissemination Activities

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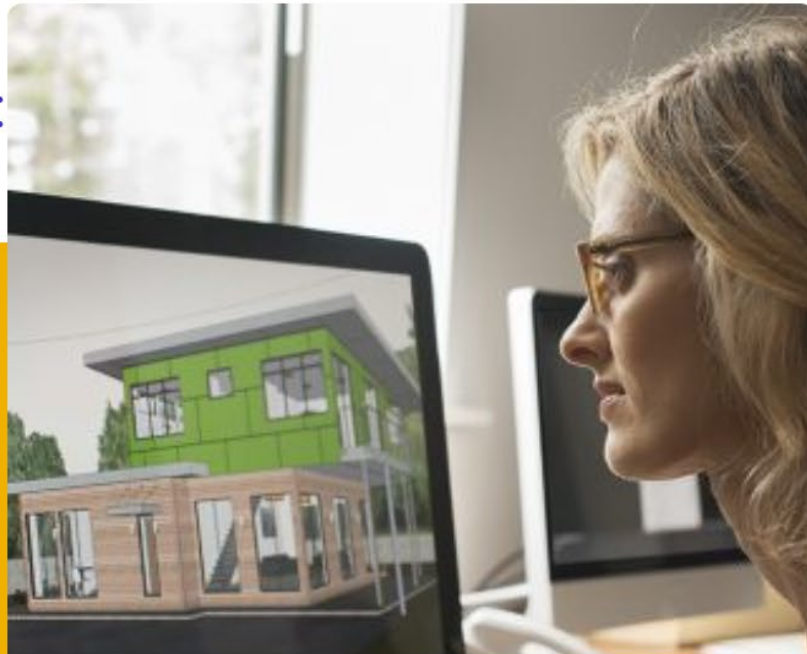


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Website – in further Development

DASBE

Digital Academy for the
Sustainable Built Environment



<https://dasbe.ie/>

About DASBE

DASBE aims to be a hub for the provision of upskilling, capacity building and education to the building sector on green construction, circular economy and digital skills.

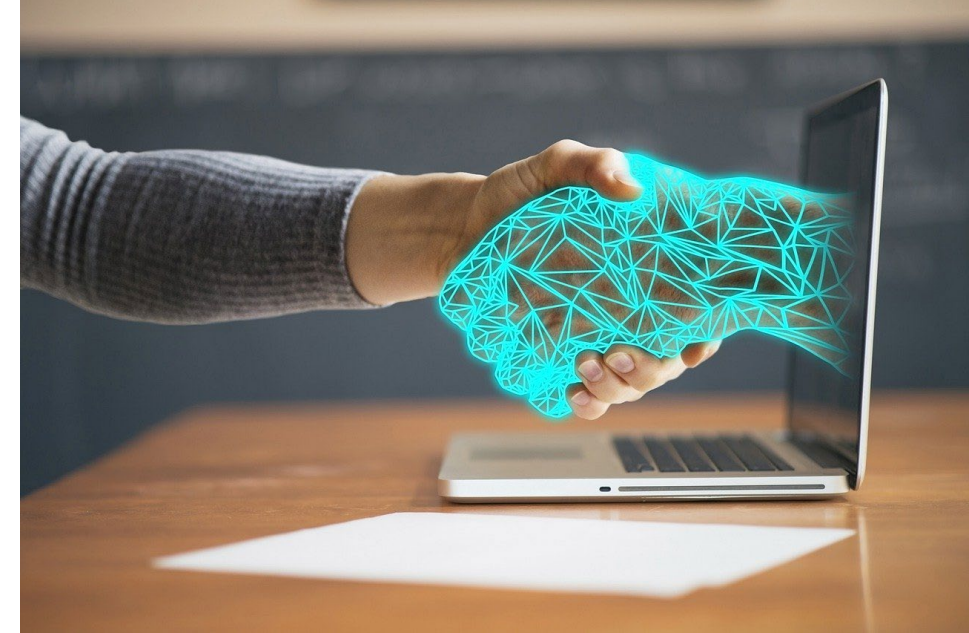
DASBE is a unique collaboration of higher education institutes and industry partners with the shared aim to be agile and responsive to the upskilling needs of the construction industry.

Are you in the construction industry and want to help guide the development of

Digital Platform – in Development

Digital Platform to:

1. Enable connectivity with Website,
2. Enable better collaboration with programme development
3. Connect directly with BUSLeague BUILD UP Skills Advisor App
4. Connect with the Construction Blueprint OER Training Platform



Digital Activities

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VR/AR/Digital Tools – in Development

Development of new tools to support programme delivery to facilitate learning:

- VR/AR/XR,
- digital twins,
- BIMxD
- Drones etc.

Establish Living labs with access to real world building data.



Pictures Courtesy of BIMzeED Project

Informing Policy

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Informing Policy

Policy Alignment

CLIMATE ACTION PLAN

Green Deal

Future jobs Ireland

National Skills Strategy

Technology Skills 2022

Expert Group on Future Skills Needs

Increase provision in areas of identified skills need:

BIM and the Circular Economy have been highlighted in the 'Roadmap to Digital Transition for Ireland's Construction Industry 2018-2021

Future proof graduates with industry relevant skills for emerging technologies:

Identify specific skills needs for the Construction sector now and in the future.

Need for the creation of a more efficient, low carbon and collaborative construction sector.

Ensure that there is a greater focus across the whole spectrum of higher education course provision on promoting and embedding transversal skills:

Particular focus to be placed on general transversal skills i.e. leadership, communication, critical thinking, decision-making, teamwork, creativity, active listening, planning etc

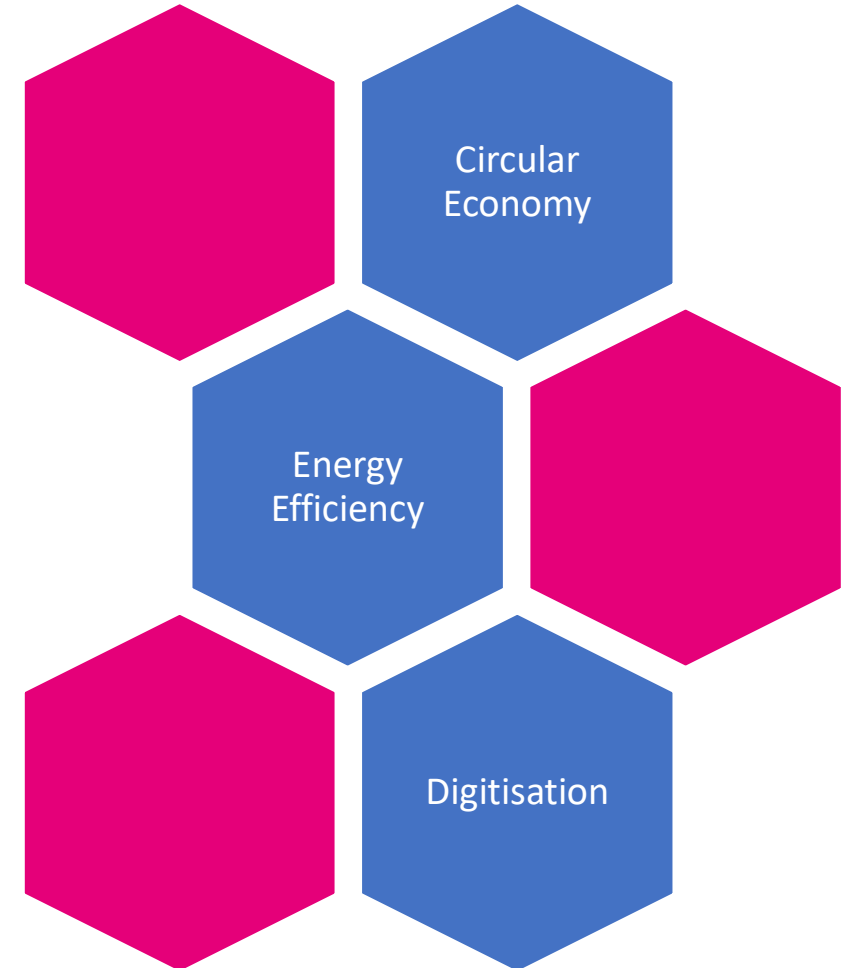
Incentivise continued reform and innovation in higher education provision building on best practice:

International Best Practice

R&D and Industry Connections

Conclusions

- DASBE will be a key tool in enabling sector transform and respond to market needs
- Enable access and information on upskilling opportunities
- Industry engagement is the key
- Seeking to create synergies rather than compete



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THANK YOU FOR LISTENING

Gathering21
Construction Innovations
for Future Generations

