



Digital Academy for the Sustainable Built Environment

Transformation Journey



















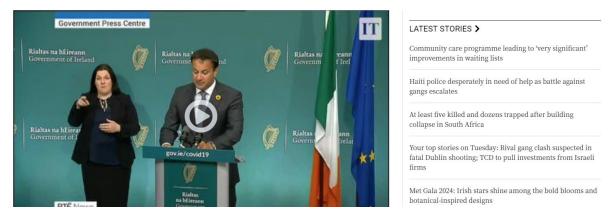
Context - Back in 2020

- A construction sector in recovery
- Changing Policy Landscape
 - Planning and Building Regulations
 - Climate action
 - Digitisation
- Emerging Housing Crisis
- Tertiary Sector Development

Politics

Ireland earns 'right to be hopeful' again as Government fast-tracks plans to reopen country

Lifting of coronavirus restrictions speeds up with effective end date of July 20th



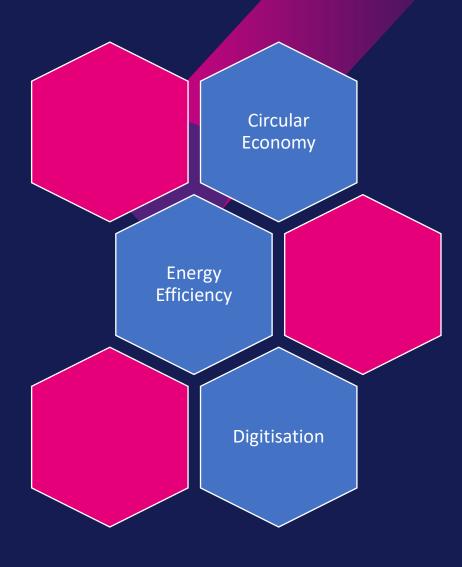
https://www.irishtimes.com/news/politics/ireland-earns-right-to-be-hopeful-again-as-government-fast-tracks-plans-to-reopen-country-1.4272136

Construction sector resource constraints

DASBE Concept

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
- Rapid Design, Development and Deployment
- On-line, 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 Ambition

A Digital Hub provides upskilling, capacity building and education for the construction sector for energy efficiency, circular economy and digital skills

D₃ - Rapid Response to Industry Needs

Collaborate with Industry and Education

VR/AR and Digital Tools

Flexible Programme Development

Blended

Major

On-Line

Minor

F2F

SPA

DASBE Platform (DASBE.ie)

Signposting

Hosting

Informing









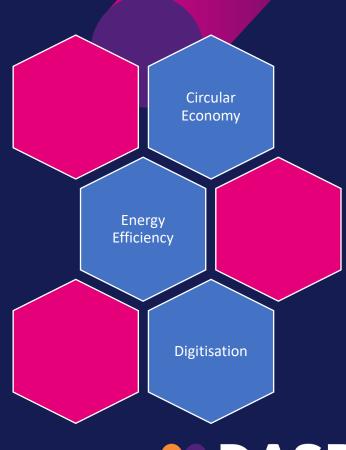
DASBE Consortium

Industry experts at the forefront of sustainability

Communication expertise

Two new Technological Universities

Industry and Professional Networks





Starting Point

- Horizon Scanning Approach
- Identifying current needs
- Profiling future opportunities
- Informing programme development
- Capturing R&D Outputs



D5.1 HORIZON SCANNING

SUMMARY REPORT 2021

February 2021



https://pixabay.com/photos/road-pavement-landscape-roadway-220058









Skills shortages continue to hamper the Republic's building industry, leading construction bodies warned on Wednesday.

The Irish Plant Contractors' can begin, calculated that th

https://www.irishtimes.com

How will UK and Irish construction sectors tackle skills shortage?

As cost, project, and program management professionals, Linesight is at the coal face when it comes to attracting the best consultants to our ranks. So, given our role sourcing construction professionals, it comes as no surprise to learn the Royal <u>Institution of Chartered Surveyors (RICS)</u> says there is a scarcity of surveyors in the UK.

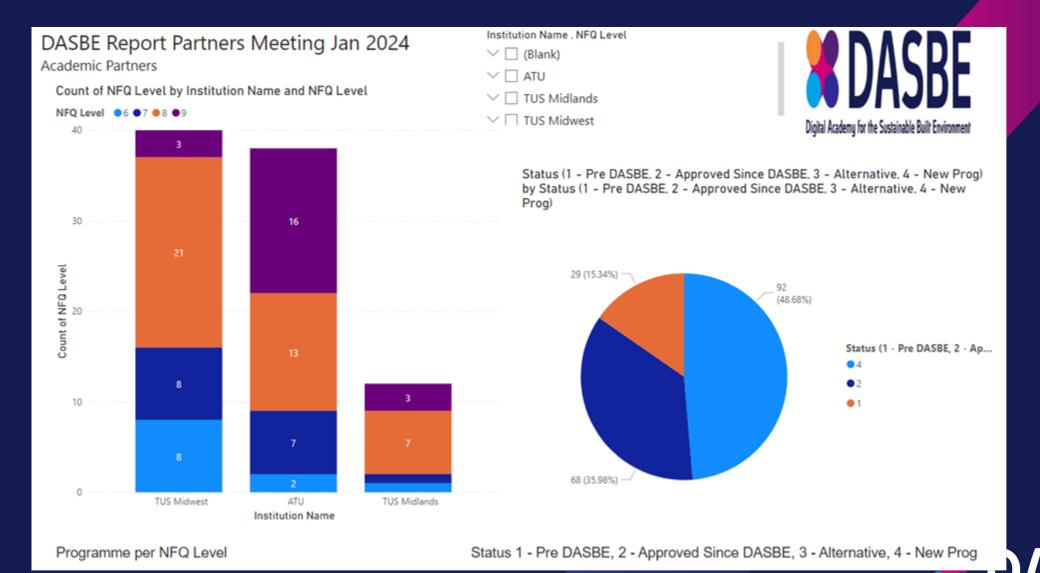
Similar research conducted by the Society of Chartered Surveyors Ireland (SCSI) in Ireland revealed that over 2.000 new job

opportunities are expected enrolment numbers, there (52%).https://www.lir

Rialtas na hÉireann Government of Ireland

Report on the Analysis of Skills for Residential Construction & Retrofitting 2023–2030

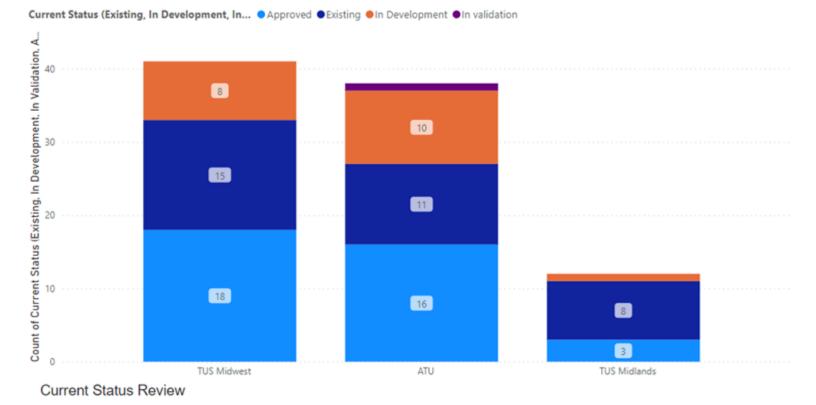
Programme Development – by NFQ



Programme Development – by Status



Count of Current Status (Existing, In Development, In Validation, Approved) by Institution Name and Current Status (Existing, In Development, In Validation, Approved)



Current Status (Exist... > ✓ □ (Blank)

∨ □ Approved

✓
☐ Existing

✓ □ In Development

✓ □ In validation

DASBE

Some Programme Highlights

- Certificate in Residential Retrofit Site Coordination (L6) TUS
 - Collaboration with Laois Offaly ETB
- Certificate in Heat Pump Installation, Commissioning, Maintenance and Servicing (L6) ATU
 - Collaboration with UniTherm
- Higher Diploma in Residential Energy Retrofit Management (L8)
 - Collaboratively between TUS and ATU
- Post Grad Diploma in Science in Built Environment Regulation (L9) ATU
 - Responding to evolution of Building Regs
- Certificate in Drones for Construction (L6) TUS
 - New technology and its application
- Certificate in Scan to BIM (L8) TUS
 - Responding to Digital Agenda















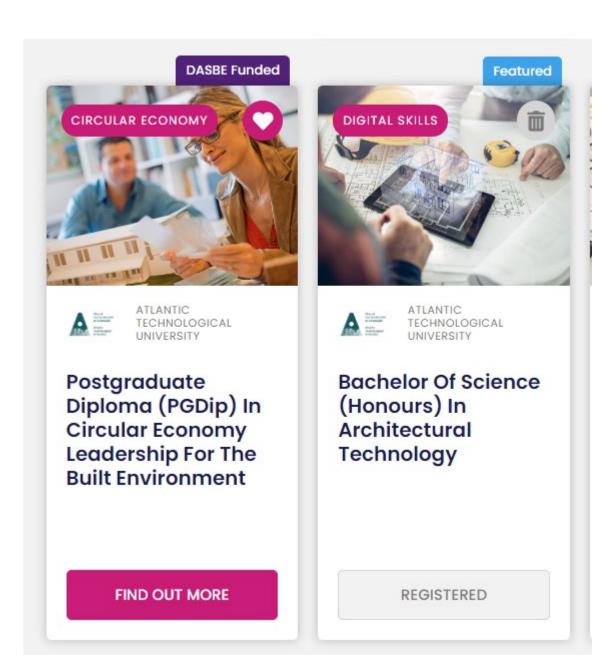




DASBE Platform

Simple Concept!

- Single Portal where you can access programmes
- "Single Sign On" from programme provider
- Develop your Portfolio of programmes completed
- One Stop Shop for programme information



Digital Platform



DASBE Platform

Reality a little more challenging!

- Final testing recently completed
- Host and Non-Hosted Programmes
- DASBE Portal Account
 - Tracks user interest and progress
 - Provides user updates
 - Promotes new and relevant programmes



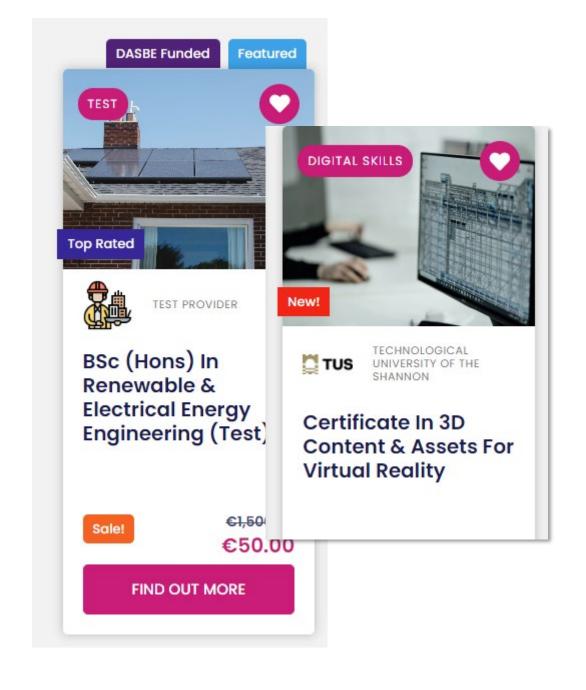


DASBE Platform

Evolution

- Shop function
- Hosting programmes
 - Training content from R&D Projects
 - Other providers with no Learning Management System
 - Ability to import courses

Launching today!



Enhancing Learning Experience

2022



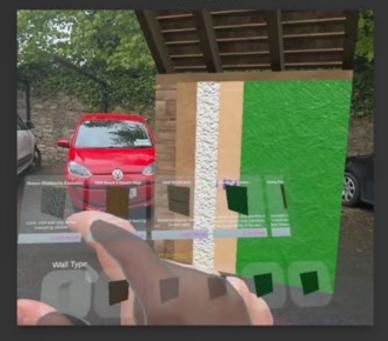
Defects In Traditional Buildings Meta Quest 2

2023



Heat Pumps & PV Meta Quest 2

Current



XR Wall Ratings Meta Quest 3



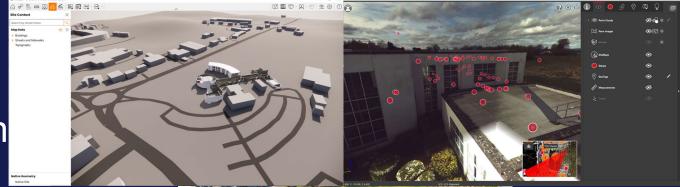


Digital Twins

Applying emerging technology

- Real world models
- Teaching & Research
- Estates and Asset Managem
- Industry collaboration
- TUS and ATU applications







DASBE Microcredentials

HCI Call – January 2024

- Responding to industry demand
- "Rapid Response" from TUS and ATU
- 52 offerings approved across consortium
- 5 20 Credits
- Circular economy, BIM, Community Energy, Heat pumps etc
- 80% funded
- Commencing September 2024



https://dasbe.ie/programmes/micro-credentials/

Lessons Learned

- "Rapid" means different things to different people
- Challenge of change is an internal and external one
- External factors influence progress e.g. creating a TU
- Labour market forces influence programme uptake
- Addressing fragmentation an on-going challenge
- Digital tools are important BUT skills, knowledge remain critical



What's Next for DASBE

- Launch Microcredentials & new programmes – September 2024
- Sustainability Plan
- Roll out of DASBE Platform
- R&D Opportunities



Upskilling challenge is here to stay!







Thank you for Listening







