11TH ANNUAL INTERNATIONAL CONSTRUCTION MANAGEMENT DAY

TUESDAY 9th MARCH 2021

GALWAY - MAYO INSTITUTE OF TECHNOLOGY, DUBLIN ROAD, GALWAY

DASBE PROJECT



- Presented by
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DASBE PROJECT

DIGITAL ACADEMY FOR SUSTAINABLE



BUILT ENVIRONMENT







BACKGROUND TO HUMAN CAPITAL INITIATIVE:

The primary objective of the Human Capital Initiative (HCI) is to underpin the provision of additional capacity across the Higher Education Sector to meet priority skill needs for enterprise.

 €300m: €60m per annum from 2020 to 2024 (from the surplus in the National Training Fund).

Pillar 1: Graduate Conversion and Specialisation Courses

Pillar 2: Additional Places on Undergraduate Provision

Pillar 3: Innovation and Agility







PILLAR 3: INNOVATION AND AGILITY

Human Capital Initiative Pillar 3, Innovation and Agility €197 million over the five-year period.

Aims of Pillar 3

- To support innovative and agile proposals from institutions or groups of institutions with potential application and impact across the higher education system.
- Proposals will align innovation and agility with national strategic objectives, key HE system objectives, and future skills needs for society and the economy.













DASBE PROJECT



Lead Partner
Limerick Institute of Technology







7 PARTNERS



BUILDING ON A STRONG PLATFORM

In addition to existing capacity at both UG and PG level, the HEI partners have the following experience and expertise:

Online and flexible learning programmes in NZEB, Energy Skills and BIM. EU R&D Projects focussed on construction skills, NZEB and sustainable building. • LIT:

• GMIT: GMIT, received awards in the field of digital education and BIM.

Research track record on energy, construction and

demolition, waste management, resource efficiency, circular economy, BIM and education for sustainability.

On-line and flexible delivery of programmes in BIM, Sustainable

Building Technology.

• AIT: Expertise in BIM and construction management. Innovative

programme development and expertise in the field of new

materials and technologies.

BUILDING ON A STRONG PLATFORM

• WWETB: Forefront of the Development and Delivery of FE programmes on sustainable construction and NZEB and low energy building.

• IGBC: The <u>Irish Green Building Council</u> is the leading authority on sustainable building in Ireland. Large network of over 160 member organisations. IGBC is working to transform the Irish construction and property sector into a global leader in quality and sustainability.

• TEA:

The leading Regional Energy Agency in Ireland, spearheaded the the Superhomes (www.superhomes.ie) deep retrofit approach and have a deep understanding of the capacity and skills training required if Ireland is to achieve its targets set out in the National Development Plan and Climate Action Plan.

PROJECT AIM

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



PROJECT GOALS

- To develop a National Digital Academy which, by 2023, will host 20 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 IoTs by 2024, thus ensuring sustainability of the initiative.
- Develop a robust strategic and business plan, by 2024, for the growth and continuation of DASBE.



8 WORK PACKAGES

WP1 Project Management deals with overall project management of the consortium (LIT)

WP2 Communication & Dissemination (IGBC)

WP3 Rapid D³ Design, develop and deploy (AIT)

WP4 DASBE Platform (LIT)

WP5: Programme Delivery GMIT

WP6 Digital and Virtual Tools (LIT)

WP7 Evaluation & monitoring (GMIT)

WP8 Sustainablity and exploitation (LIT)



PROJECT TASKS



1 PROGRAMME DEVELOPMENT

Digital Badges and Micro-credentials

SPAs and full awards at undergraduate level (6,7,8)

Post Graduate Diploma (9)

M.Sc Programme development

3 PROJECT GOAL DELIVERY

Develop National Digital Academy
And KPIs (students and programmes)

Design, Development and Deployment model (D³)

Inter Institutional collaboration

Business model



WORK PACKAGES 1-8

WP 1 Project Management
WP 2 Communication Dissemination
WP 3 RAPID D3
WP 4 Platform
WP 5 Programme Delivery
WP 6 Digital/VR Tools
WP 7Evaluation and monitoring
WP 8 Sustainability



OUTPUTS

DASBE PORTAL



- DASBE PLATFORM
- Query requirements
- Range of programmes matching search
- Direct to the relevant Institution or provider
- Central portal for Upskilling and CPD for tradespersons, graduates and professionals

Key Benefits

Central Portal

Wide range of offerings from short courses to full level 9 QQI accredited programmes

Flexible and blended focused

Industry informed

Funding will enable cost effectiveness

Cross disciplinary

Multi-institute



ONLINE FOCUS



INITIAL AREAS AND PROGRAMMES IDENTIFIED

- The initial focus in each IoT will be exploring existing programme alignment
- A number of key areas have been identified across the partner IoTS.
- The following programmes are currently being developed at level 9
- M.Sc. in BIM and Digital construction
- M.Sc. in the Circular economy for a Sustainable Built Environment
- M.Sc in Built Environment Regulations
- M.Sc in Sustainable Energy Management
- M.Eng in Energy and communications Infrastructure



INITIAL AREAS AND PROGRAMMES IDENTIFIED

- The following programmes are proposed for exploration also at levels ranging from 6-9
- P G Certificate in the SDG s for the Construction Industry
- H Dip in Retrofit Technology
- Certificate in M & E for Retrofit
- Certificate in Community Energy
- Certificate in Sustainable Energy finance
- PG Dip in Green Engineering
- PG Dip in Engineering Management
- SPA in Construction surveying and Data processing
- Construction Health and Safety



HORIZON SCANNING

Project will be informed by a structured approach to horizon scanning which will build on existing research.

Currently a lot of interest in this area and a number of initiatives are already under way

Industry Partners
Industry Organisations
Practitioners
Professional Bodies
Higher Education and academics



ACTIVITIES AND TARGETS

October 2020 Project announced by Department of Further and Higher Education research

Innovation and Science.

October 2020 Project initiated.

Assessment and development of existing capacity

New Programme Development planning commenced in the HEIs

???? 2021 Official launch of DASBE project nationally.

Late 2021 Testing of platform

December 2023 20 programmes available in on-line or blended format

January 2025 40 programmes



9 Prioritys identified to address the skills demand issues

Building Future Skills The Demand for Skills in Ireland Built Environment Sector to 203

DASBE directly addresses four of these

No 2 Examine scope for reform for BE education training and qualifications

Expert Group on Future Skills Needs

No 3 Aligning skills within the BE sector technology change

No 4 Develop the skills to enhance the sectors contribution to Climate change mitigation

No 5 Develop and increased engagement with entrepeneurial and management skills training.



BUILDING BACK BETTER

"A more resilient economy depends on a shift to sustainable practices"

Returning to "business as usual" will not deliver a sustained long-term economic recovery that also improves well-being and reduces inequality.

Focus on reduced environmental impact





BUILDING BACK BETTER

A central dimension of building back better is the need for a people-centred recovery that focuses on well-being, improves inclusiveness and reduces inequality.

Strengthening resilience to the impacts of climate change

Aligning recovery measures with long-term objectives for reducing GHG emissions

Fostering innovation that builds on enduring behaviour changes

Improving resilience of supply chains, including through increased adherence to circular economy principles:



