



TUS

**Technological University of the Shannon:
Midlands Midwest**
Ollscoil Teicneolaíochta na Sionainne:
Lár Tíre Iarthar Láir

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**Dámh na hInnealtóireachta agus na Timpeallachta Tógtha
Faculty of Engineering and the Built Environment**

Roinn na Timpeallachta Tógtha

Department of the Built Environment

Report of External Validation Panel

External Validation Visit, 25th April 2022

for the

Higher Diploma in Engineering in Residential Energy Retrofit Management

&

Embedded Awards

**Certificate in Residential Energy Retrofit Fabric (20 credits),
Certificate in Residential Energy Retrofit Systems (15 credits),
Certificate in Residential Energy Retrofit Management (25 credits)**

1.0 INTRODUCTION

This report outlines, in summary form, the proceedings of the external validation visit for the proposed Higher Diploma in Engineering in Residential Energy Retrofit Management and the Embedded Awards - Certificate in Residential Energy Retrofit Fabric (20 credits), Certificate in Residential Energy Retrofit Systems (15 credits), Certificate in Residential Energy Retrofit Management (25 credits) and the findings and conclusions of the External Validation Panel conducted on 25th April 2022. The external validation visit was undertaken in accordance with TUS Academic Regulations. An external validation panel makes an independent impartial judgement on a programme proposal.

2.0 GENERAL INFORMATION

2.1 Higher Education Provider:

Institute: Technological University of the Shannon: Midlands Midwest
Faculty: Faculty of Engineering and the Built Environment
Department: Department of the Built Environment
Date of Visit: 25th April 2022

2.2 Programmes Evaluated

Programme Title:	Higher Diploma in Engineering in Residential Energy Retrofit Management
Award Title:	Higher Diploma in Engineering
NFQ Level:	Level 8
Duration:	FT 12 months, PT 18 months
ECTS Credits:	60

Programme Title:	Certificate in Retrofit Management
Award Title:	Certificate
NFQ Level:	Level 8
Duration:	PT 1 semester
ECTS Credits:	25

Programme Title:	Certificate in Retrofit Systems
Award Title:	Certificate
NFQ Level:	Level 8
Duration:	PT 1 semester
ECTS Credits:	10

Programme Title:	Certificate in Retrofit Fabric
Award Title:	Certificate
NFQ Level:	Level 8
Duration:	PT 1 semester
ECTS Credits:	20

2.3 External Validation Panel of Expert Assessors

<u>Name:</u>	<u>Affiliation:</u>
Mr Vincent McCarthy	Formerly LIT (Chairperson)
Dr. Joe Harrington	MTU
Dr. Avril Behan	TUD
Ms Niamh Kearns	N J Kearns & Company Ltd, Architects
Mr Dara McGowan	Partel
Mr Barry Madigan	Student Representative

2.4 Institute Staff

President	Prof. Vincent Cunnane
Vice President and Registrar	Dr. Terry Twomey
Dean of Faculty	Dr. Maria Kyne
Head of Department of the Built Environment	Dr. Pat Gill
Dean of Department, Flexible & Work Based Learning	Mr Seamus Hoyne
Programme Leader	Ms Elisabeth O'Brien

3.0 FINDINGS AND RECOMMENDATIONS OF EXTERNAL VALIDATION PANEL

3.1 Main Findings

The External Validation Panel of Assessors recommends approval of the: Higher Diploma in Engineering in Residential Energy Retrofit Management (Part-time and Full-time Delivery Modes) and Embedded Awards,

- *Certificate in Residential Energy Retrofit Fabric (20 ECTS Credits),*
- *Certificate in Residential Energy Retrofit Systems (15 ECTS Credits), and,*
- *Certificate in Residential Energy Retrofit Management (25 ECTS Credits)*

subject to the Recommendation(s) as specified in Section 3.3

3.2 Conditions

3.2.1 No conditions apply

3.3 Recommendations

- 3.3.1 Provide further detail in the Entry Requirements Section of the programme document on the specified cognate areas for Level 7 entry and for non- standard entry such as RPL for holders of Craft Apprenticeship, or other Level 6 awards, with relevant experiential learning.
- 3.3.2 Review the module descriptors to include further detail defining the learning outcome and indicative syllabus content which the panel feel would benefit from more depth. Provide greater consistency across the module suite.
- 3.3.3 Remove the terminal exams which the panel believes may not be the best for learners on a Higher Diploma. Explore options for open book in class tests or other Continuous Assessment options including Oral Exams and Interviews that allow students to showcase their project work and knowledge.
- 3.3.4 Incorporate more team-based assignments to provide students with the opportunity to collaborate. There should be at least one teamwork element that is formally assessed in each award.
- 3.3.5 Revise the recommended reading and learning resources within the module descriptors and ensure that up to date references are used in all modules where appropriate.
- 3.3.6 Include in the programme document a broader statement about the progression opportunities for students including opportunities outside of TUS.

- 3.3.7 During programme rollout, consider the early development of programme delivery schedules and timetable to support the participation of Part-time students in employment and provide this to participants at the earliest opportunity.
- 3.3.8 Further emphasise moisture management in the content of the module Air tightness.
- 3.3.9 Revisit the indicative syllabus of the Module Circular Economy and Procurement and enhance the learning content relating to Procurement to be more reflective of the title. Add reference to the Office of Public Procurement.
- 3.3.10 Delete the duplicate learning outcome from the module Retrofit Business Planning & Finance.
- 3.3.11 Amend Learning Outcome 1 of the module Energy Retrofit Project to reflect a Level 8 outcome. Reference a Project Journal rather than the Project Diary to incorporate the reflective dimension. Ensure delivery of pre-requisite knowledge from other modules delivered in parallel is co-ordinated with the delivery of the Project module.
- 3.3.12 Conduct a global review of the programme document for typographical errors including references to the former LIT.

3.4 Commendations and Observations

- 3.4.1 The panel commends the Collaborative nature of the Programme and its delivery and the links to the DASBE Project and HCI Pillar 3. The mix of TUS and Atlantic Technological University in co-presenting this programme is particularly noteworthy.
- 3.4.2 The panel commends the programme team on the development of an innovative and strategic programme in a discipline area of fundamental importance to contemporary society.
- 3.4.3 The panel notes that this programme will contribute to the further development of the Irish construction sector.
- 3.4.4 The panel commends the strong engagement with industry evident during the development of the programme.
- 3.4.5 The panel commends the cross modular assessment elements included in the programme.

- 3.4.6 The panel notes and commends the expertise and extensive experience of the Programme Team. The national and EU research and project experience is particularly noteworthy.
- 3.4.7 The panel commends the evident enthusiasm of the programme team and their strong engagement with the panel throughout the event.


Signature of Chairperson

Date 26 April 2022