



TUS

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

An Chomhairle Oidhreachta
The Heritage Council



Certificate in Energy Renovation for Traditional Buildings



Source: The House on the Brae, Ramelton, Co Donegal, Heritage Council Community grant-funded project CH14840, Insulated sloped ceiling. Photo Duncan McLaren, Dedalus Architecture

Following on from the successful Fundamentals of Energy Renovation of Traditional Building CPD course in 2019-20 the Heritage Council is pleased to announce, in partnership with the Technological University of the Shannon (TUS), a **new accredited Level 8, Special Purpose Award “Certificate in Energy Renovation for Traditional Buildings”**.

This course will introduce participants to the fundamental principles of energy renovation: thermal performance characteristics of historic building materials’, energy management in historic interiors, and the use of appropriate designs and specifications for works to reduce energy use in traditionally-built structures in accordance with good practice conservation principles. It will aid in finding pathways to compliance with Part L of the Building Regulations and based on ISEN 16883 ‘Conservation of cultural heritage – Guidelines for improving the energy performance of historic buildings’. It will aim to balance energy reduction strategies with heritage conservation principles. It will take a sustainability perspective, highlighting minimum intervention principles as a means of further reducing the carbon impact of the buildings and construction through maximising the potential for the adaptive re-use of buildings and building elements.

In addition, a new innovate module ‘Building Defects Detection and Analysis’ will introduce participants to digital tools and techniques for documenting the condition of existing buildings and detecting and analysing defects. These tools have become essential components in contemporary

design and construction practices. The second module will demonstrate how to integrate, utilise and exploit these for the specification of works to existing traditional buildings.

This 10 credit SPA, Certificate in Energy Renovation for Traditional Buildings, is just one of a number of Special Purpose Awards (SPA's) offered by the Digital Academy for the Sustainable Built Environment (DASBE) in response to the climate action plan. DASBE aims to upskill building professionals in the design and delivery of high quality, energy-efficient renovations to existing buildings.

This course will be of interest to those wishing to expand their renovation or retrofitting capabilities and qualifications in specifying for the repair and modification of traditional construction, architectural and engineering defect detection and management.

What will I study?

The following modules are delivered over the course of two semesters:

SEMESTER 1

Fundamentals in Energy Renovation of Traditional Buildings – 5 credits

This module is to provide the student with the relevant knowledge of the underpinning principles of building specifications, typical construction performance characteristics, environmental approaches, appropriate methodologies and solutions during the energy renovation of traditional buildings (pre 1940s). Live guest speakers and online quizzes leading to a final reflective renovation project.

SEMESTER 2

Building Defects Detection and Analysis – 5 credits

Students will gain practical experience in the use of digital tools for detecting and analysing defects in existing buildings prior to energy upgrades. Techniques for sensitive data gathering in accordance with best practice conservation principles applied. Students are shown how the use of thermal imaging cameras, scanners and other tools can be utilised to capture building defects. Online practical digital activities and Virtual Reality training is provided

Guest lecturers and industry contributors will present the programme. The blended learning format will include five days of fortnightly live lectures and workshops, followed by on-line, practical and digital workshops to demonstrate the knowledge acquired, and a formal assessment. The two modules will run sequentially over 30 weeks.

Minimum Entry Requirements

Applicants will require a minimum Level 7 award in relevant cognate areas.

Mature students (23 years of age on 1st January preceding application) can apply.



Digital Academy for the Sustainable Built Environment

Applicants who do not meet the minimum entry requirements but who have sufficient industry experience by applying Recognition of Prior Learning (RPL) policy and procedures established by the University.

Cost

Special Purpose Award Certificate in Energy Renovation in Traditional Building- €800 (Financially supported by DASBE)

If you are not in a position to complete the entire SPA now, you have the option to complete the Fundamentals in Energy Renovation for Traditional Buildings offered as a stand-alone module. This flexibility is an important innovation of DASBE, providing the opportunity to complete modules in your own time, building up to an accredited certificate or award.

Fundamentals of Energy Renovation of Traditional Building - €600

How to Register

We are taking applications now and if you wish to register please click on the following link:

[TUS | Energy Renovation for Traditional Buildings \(lit.ie\)](https://www.tus.ie/courses/energy-renovation-for-traditional-buildings/)

How to get in touch:

Ms. Elisabeth O'Brien at Email: info@dasbe.ie

Find out more about this and other courses on DASBE <https://dasbe.ie/>