

# Requirements for Training Programmes

Leading to Building Energy Rating Assessment for Dwellings  
*accreditation for BER assessor registration*

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Version	Update	Date
1.0	Original training specification	May 2014
2.0	Training specification removed and contained in a separate document – Draft for consultation	Jan 2023

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The BER training course is an essential component of the BER assessor (dwellings) registration process. To register as a BER Assessor individuals must complete an Accredited Domestic BER Training Course with one of [SEAI's listed Training Course Providers](#).

### **BER Assessor Registration**

To register with SEAI as a domestic BER assessor, an individual must have achieved the standard of knowledge and competence set out in the [Occupational standard of BER assessors for dwellings](#). This is achieved by the following:

1. demonstrating they have met the pre-qualification requirements,
2. successfully completing an accredited BER training course with one of SEAI's listed training course providers and achieving a result of 70% or more and
3. completing the SEAI induction module.

This document describes the requirements for BER training programmes and training providers.

**As a minimum, recognised training programmes must fulfil all criteria detailed in this document.**

## Training Programme Requirements

### Course Overview

The purpose of this training course is to equip the learner with the knowledge, skill and competence to carry out Building Energy Rating (BER) assessments on dwellings. The BER training course is one component of the BER assessor registration process. Further information on the BER assessor registration criteria is available on the [SEAI website](#).

### Training Programme Award

The award on successful completion of a programme must be at least a Level 6 minor award, issued by such a National Awards Body.

Requirements for QQI NFQ Level 6 Minor award are detailed in the [QQI Component Specification for Building Energy Rating Assessment \(Dwellings\) 6N0732](#). This award has a credit value of 15 ECTS credits.

Training providers may design a specific programme to meet this training specification, or they may integrate the specification into other programmes subject to agreement with the validating body.

### Training Programme Entry Criteria

The training provider may set prequalification requirements for entry to a particular programme in accordance with the relevant validating body's criteria.

### Training Programme Duration

Duration and delivery of training programmes should be appropriate to the learners' needs to enable learners to meet the standard of knowledge and competence detailed in the occupational standard for BER Assessors for Dwellings.

Trainers must ensure the course includes enough learning hours so that learners have enough time to

- cover all learning outcomes sufficiently including time to practice surveying, calculations, inputting to the DEAP software and checking results prior to completing the assessment component of the course,
- survey dwellings in the company of a trainer in addition to the dwelling selected for the assessment,
- familiarise themselves with the latest version of all BER documentation

#### **QQI guidance indicates:**

- **150 learning hours for a Level 6 minor award. This includes contact teaching hours, self-directed learning, and completion of assignments and examinations.**
- **Contact teaching hours ranging from 50 to 130 hours and the self-directed learning hours ranging from 20 to 100 hours.**

### Training Programme Delivery

Training programme delivery should include the following:

- Classroom-based learning or blended learning (mixture of remote and contact teaching hours)
- Self-directed learning hours during and outside contact teaching hours. Trainers should provide guidance to learners on the hours needed for self-directed learning.
- Contact teaching hours should include site surveys with trainer guidance and supervision and practical assignments to apply learned content
- Contact teaching hours should not include student assessments leading to the training award.

## Learning Outcomes

On completion of the training programme, learners will be able to carry out a BER assessment competently and independently. Table 1 lists the required learning outcomes.

Learning Outcomes	
1	Demonstrate an understanding of the current European and National legislative background relevant to the Energy Performance of Buildings Directive.
2	Describe the assessor obligations and operation of the BER administration systems.
3	Explain the current Dwelling Energy Assessment Procedure (DEAP) methodology
4	Describe the requirements set out in Part L of the Building Regulations and other relevant Building Regulations
5	Determine and record BER relevant details from plans and specifications of dwellings
6	Determine and record BER relevant details through survey of new and existing dwellings
7	Determine the fabric and ventilation parameters for heat losses and gains
8	Determine the lighting energy usage parameters.
9	Identify space and domestic hot water heating systems
10	Use the current DEAP methodology and software to produce a BER certificate and advisory report for dwelling types of varying complexity
11	Critically evaluate and communicate the details of a BER certificate and advisory report
12	Explain how to optimise the energy performance of dwellings with consideration to relevant standards, codes and practices
13	Identify options to achieve compliance with Part L of the Building Regulations for dwellings

## Indicative Syllabus

1	Legislative background, administrative requirements and DEAP
2	Data collection from plans, specifications, <b>documentation</b> and site surveys
3	Building fabric, ventilation and lighting
4	Space and domestic hot water heating systems <b>and renewables</b>
5	Energy use, CO2 emissions, BER certificates and advisory reports

## Requirements for Training Programme Assessment

In order to demonstrate that learners have reached the standards of knowledge, skill and competence identified in all the learning outcomes, learners are required to complete

- 4 assignments (50% of marks) and
- 2 examinations (50% of marks)

All learning outcomes must be assessed and must be carried out in accordance with the validated programme. SEAI reserve the right to review and monitor the assessment process.

## Assignments

Training providers must devise four individual assignments that require the learners to produce evidence that demonstrates an understanding and the application of the range of specific learning outcomes.

**The assignments should be sufficiently complex to ensure that learners can demonstrate that they can assess a variety of new and existing dwelling types of varying complexity in accordance with the DEAP methodology.**

All assignments must be completed individually rather than as group work.

Assignment 1	U-value calculations	5% of total marks
Learners are required to		
(a) source thermal conductivity values for components of the following building element types from any of the sources referenced in the DEAP manual		
(i) wall, (ii) floor and (iii) roof, (iv) dormer roof and (v) either a floor or wall adjacent to an unheated space		
(b) calculate the U-values for the following building elements either from first principles or using an acceptable U-value calculator in accordance with the standard IS EN ISO 6946.		
(i) wall, (ii) floor and (iii) roof, (iv) dormer roof and (v) either a floor or wall adjacent to an unheated space		

Assignment 2	BER Assessment based on plans & specifications	15% of total marks
Learners are required to		
(a) complete a BER assessment of a new dwelling from plans and specifications. The dwelling specification should be such that the dwelling does not comply with Part L and should include at least 2 features from Group 1 and 2 features from group 2. Produce the Part L compliance report and dwelling report for the dwelling.		
(b) vary the specification to achieve an A1-rated dwelling, compliant with Part L of the building regulations. Specification to include at least 1 feature from Group 3. Produce the part L compliance report and dwelling report for the compliance solution		
(c) list the documentary requirements for non-default values used in the assessment		

Group 1	Group 2	Group 3
Dormer windows and dormer roof	Mechanical ventilation system (using non-default data)	Y-value calculation

More than one space heating appliance	A group heating system	Low water consumption
Split level	Photovoltaics	
Integral garages	Heat pump	
Open plan kitchen dining living area	Solar water heating	

<b>Assignment 3</b>	<b>BER Assessment of a dwelling (trainer selected dwelling)</b>	<b>15% of total marks</b>
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Learners are required to

- survey an existing dwelling in the company of the trainer and complete a BER assessment of the dwelling. The dwelling should include at least 2 features from Group 1
- list the documentary evidence requirements to support the BER assessment
- vary the dwelling characteristics appropriately to achieve a B2 or better. If the existing BER has a 'B' rating, the upgraded dwelling should achieve an A-rating.
- produce a dwelling report for the original and the improved BER assessment

**Group 1**

Dormer windows and dormer roof	2 heating systems
Room in roof	Solar PV
Porch on main entrance or conservatory	Heat pump
An extension	Solar thermal
Split level	Mechanical ventilation

<b>Assignment 4</b>	<b>BER of an existing dwelling (student selected dwelling)</b>	<b>15% of total marks</b>
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Learners are required to

- survey an existing dwelling and complete the BER assessment
- produce a dwelling report for the completed assessment
- submit a full evidence file to support the BER assessment including site notes, sketches and survey form, photographs and supporting documentation

The dwelling must be different for each student in the training programme and marks are awarded for completeness of the BER file and accuracy of the assessment.

## Examinations

<b>Exam Part 1</b>	<b>Short Answer Questions</b>	<b>10% of total marks</b>
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Training providers must devise an examination consisting of 10 questions that assess learner's understanding of the DEAP methodology. The questions should examine the learner's ability to recall, apply theory and define information and identifying products and systems in a dwelling that affect a BER. The answers should be in written form, including any illustrations and must be categorised as short in length. The format of the examination must be short questions of equal marks.

Learners must attempt all questions.

<b>Exam Part 2</b>	<b>Practical Examination</b>	<b>40% of total marks</b>
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Training providers must devise a practical examination that requires learners to demonstrate their ability to use the DEAP software in a supervised setting for a previously unseen dwelling to calculate the energy use and CO2 emissions. The practical examination must be of such depth and breadth that requires learners to apply the most significant aspects of the DEAP methodology.

For the exam, learners must complete an assessment of a dwelling containing at least 2 features from Group 1 and produce a dwelling report.

Following the initial assessment of the dwelling, the learner must make suitable improvements which should, at a minimum, include 2 features from Group 2. Learners should produce a dwelling report for the upgraded dwelling.

Group 1	Group 2
Dormer windows and dormer roof	Mechanical ventilation system using non-default data
Conservatory	A solar water heater
More than one space heating appliance	Solar PV
Split level	A group heating system
An extension	A heat pump

## Requirements for Training Providers

### Programme Trainers

All programme trainers must have as a minimum:

- A level 8 award under the National Framework of Qualifications in a relevant engineering, building surveying or architecture discipline or an equivalent relevant technical professional qualification
- Working knowledge of the current Irish Building Regulations
- Registered BER assessor and be technically competent and familiar with current practices and products that are applicable to the particular part of the BER programme to which they are training
- A minimum of five years professional experience in the building sector or a minimum of five years appropriate training experience
- An appropriate training qualification or at least 5 years training experience or evidence that they have completed adequate shadow BER training with a BER trainer who has an appropriate training qualification or 5 years training experience

### Standards of Training Programme Delivery

Training must be provided by a training provider offering a programme validated by an awarding body that makes awards that are recognised within the National Framework of Qualifications.

The programme must include an external examination element. The external examiner must have sufficient subject knowledge to allow for adequate assessment of robustness and thoroughness of the examination process.

SEAI will review periodically training course content and delivery. Training providers must make material available for review when requested by SEAI. Reviews may include course content, examination papers and assignment briefs,



**marked submissions and results.** (All training material will be treated confidentially and will not be disclosed to any third party without written consent from the training provider)

## Facilities

The programme and examination should be provided in facilities that are clean, smoke free, secure with a quiet environment, adequate heating, lighting, ventilation and adequate room for all learners.

The programme should be designed to cater for candidates with special requirements.

