Non-domestic BER Assessor Training Course (interim)

Specification
February 2020

General Aims

This course is aimed at learners seeking to join the non-domestic BER Assessor register. This course provides an introduction to and overview of non-domestic BER assessment and must be combined with self-directed learning covering all associated documentation and guidance, followed by the completion of an examination and practical assignment.

This course is required for those seeking to join the register as a non-domestic BER assessor.

Structure of learning outcomes

The specific learning outcomes are grouped into 6 units:

Unit 1   Overview – EPBD, the national calculation methodology and calculation tool and supporting documentation

Unit 2   Building Type, Activity and NCM databases

Unit 3   Building Geometry and Zoning

Unit 4   Identify and Input HVAC Systems

Unit 5   Part L of the Building Regulations and using software to show compliance with Part L

Unit 6   Using SBEM to carry out calculations and interpreting results

Unit 1   Overview

Aim   The aim of this unit is that the learner gains an overview of EPBD, The National Calculation Methodology and calculation tool and supporting documentation. To give an introduction to the use of iSBEMie, an approach for the Non-Domestic Energy Assessment Procedure (NEAP Methodology) for assessing the energy performance of buildings.

Unit 2   Building Activity and Construction Databases

Aim   The aim of this unit is that the learner gains an understanding of the description of the contents of the NEAP Construction, Glazing, and Activity databases. A comprehension of how to select the most appropriate Activity types in an assessment of a building.

Unit 3   Building Geometry and Zoning

Aim   The aim of this unit is that the learner gains an understanding of how to input a building in iSBEMie and the rules around subdividing a building into zones.

Unit 4   Identify and Input HVAC/DHW/Ventilation Systems

Aim   The aim of this unit is that the learner is proficient in understanding different HVAC/DHW/Ventilation systems, what to look for on-site and how to enter them in iSBEMie.

Unit 5   Building Regulations Part L and using software to demonstrate compliance

Aim   The aim of this unit is that the learner gains an understanding of Part L of the Building Regulations for new and existing buildings. Describe the Part L requirements which the SBEM software demonstrates conformance with.

Unit 6   Using SBEM to carry out calculations and interpreting results

Aim   The aim of this unit is that the learner gains an understanding of the results from the calculation and comprehends the difference between Actual, Notional & Reference Buildings. The difference between Primary and Delivered Energy and the different energy mixes in buildings.

Assignment – 70% of total marks

Learner must achieve a minimum of 70% in order to pass.

Training providers must devise a practical assignment that requires learners to demonstrate their ability to use the iSBEM software for a previously unseen building to calculate the energy use and CO2 emissions. The assignment must be of such depth and breadth that requires learners to apply the most significant aspects of the NEAP methodology.

Learners are required to complete a BER assessment of a new building, from plans and specifications and vary the specification to demonstrate compliance with the current Building Regulations Part L. Learners must generate a Part L compliance report.

The new building must contain the following:
- A minimum of 3 zones – 2 conditioned (1 zone = heating system 1) + (1 zone = heating system 2) + 1 un-conditioned zone
- Full lighting design for each zone
- Mechanical ventilation system
- Hot water system
- Renewables

The assignment should also include at least 1 U-value calculation from first principles

The assignment must be completed individually, rather than as group work, following the delivery of the course content.

Examination – 30% of total marks

Short Answer Questions (2hr) – 30% of total marks

The training providers must include an examination consisting of 20 questions that assesses learners' understanding of all 6 units. The questions should examine a learners' ability to apply theory, define information and identify products and systems in a building that effect a BER. The answers should be in written form and categorised as short in length. The format of the open book examination must be short questions of equal marks.

Learners must attempt all questions and must achieve a minimum of 70% in order to pass.

Learning hours:

Course content (excluding assignment and examination):   15 hours (2 days) minimum

Self-directed learning:
It is expected that the learner will familiarise themselves fully with the content contained in the following:

- Non-Domestic Survey Guide
- iSBEM User Guide – 3 volumes
- SEAI Non-Domestic Technical Bulletins
- Building Regulations TGD Part L - 2008
- Building Regulations TGD Part F - 2009
- NEAP Modelling Guide and SBEM Technical Manual
- Code of Practice for Building Energy Rating (BER) Assessors and Display Energy Certificate (DEC) Assessors, July 2020
- EPBD 2002-91-EC (16th December 2002)

- EPBD 2010-31-EU (Recast) (19th May 2010)
- Quality Assurance System and Disciplinary Procedure
- S.I. No. 243 of 2012

On successful completion of the course a certificate must be issued to the candidate by the training provider containing the course name, training provider, date of completion and result achieved.

Version	Update	Date
1.0	Interim document created	February 2020