



Building Energy Rating Assessment (Dwellings)

QQI level 6 Module 6N0732

Course Handbook





Contents

QQI Level 6 Module 6N0732	4
Course Objectives	4
Who Is This Course Intended For?	4
Entry Requirements	4
Course Content	4
Special Requirements	5
Materials required to attend the course	5
Course Assessment Information	5
Assessment of Course	5
Summary	5
Assignments	5
Assignment 1:	6
Assignment 2:	6
Assignment 3:	6
Assignment 4:	6
Assignment File Formatting	6
Deadline for Assignments	6
Examination	6
Materials required for the examination	7
Assessment Monitoring	7
Access to Examination Room	7
Authorship Statement	7
Equality & Diversity	8
Learners with learning disabilities and special requirements	8
Access, Transfer & Progression	8
Award/Certification	8
Registration with SEAI as a BER assessor	8
Appeals/Repeats Process	8
Assessment malpractice	8
Frequently Asked Questions	9
What is the course duration?	9
What do I need to know in order to attend the course?	9
What do I need to do to attend a BER course?	9
What do I need to be eligible to register with SEAI (Sustainable Energy Ireland)?	9
What is considered a successful completion of a BER training course?	10
How is the CMSE Training BER course assessed?	10





What is the procedure to register as a BER Assessor?	0
What are the employment/ business opportunities for BER Assessors?	0
What is the current Status in relation to Registered BER Assessors?	0
IMPORTANT NOTE ON THE TIME SCALE FOR QQI REGISTRATION	0





Outline Building Energy Rating Assessment (Dwellings) QQI Level 6 Module 6N0732

Course Objectives

- Explain the legislative background, administrative requirements and Dwelling Energy Assessment Procedure (DEAP) methodology for BER
- Demonstrate the ability to accurately collect data from plans, specifications and site surveys of dwellings for provisional, new-final and existing dwellings
- Produce BER Certificates and Advisory reports using the DEAP methodology for new and existing dwellings of varying complexity
- Demonstrate the ability to undertake limitation of primary energy and CO2 emission calculations as required by the Building Regulations Part L.
- Show compliance of a building's design with all aspects of the Building Regulations Part L
- Explain and quantify the significance, in BER terms, of varying the specifications for dwellings.

Who Is This Course Intended For?

• This course is aimed at those involved in the design and construction of new dwellings and the retro-fitting of insulation, energy efficient upgrades and renewable energy systems to existing dwellings.

Entry Requirements

• To do this course a person must have good computer skills, a level 6 certificate in a trade or construction or equivalent qualifications + relevant life and work experiences.

Course Content

- Background to Energy Performance of Buildings Directive (EPBD)
- Irish Legislation on building energy ratings
- Building Regulations Part L
- Dwellings Energy Assessment Procedure (DEAP)
- Measuring Relevant Building Dimensions
- Calculating U values
- Energy assessment on domestic hot water systems
- Alternative Energy Heating Systems
- Assessments from plans and specifications
- Surveying of existing dwellings
- Assessments of existing dwellings





Special Requirements

- Please make CMSE Training aware of any special learning needs/requirements to enable you to
 participate fully in the program. It is CMSE Training's policy to support any special requirements of
 learners during the course program and course assessment.
- 4 Assignments will account for 50% of the final grade
- 1 Examination divided into 2 sections (short questions & practical exam) will account for 50% of the final grade.
- Candidates must achieve 70% in each of the assignments & exam sections to achieve the pass mark required to register with SEAI.

Materials required to attend the course

- Laptop (minimum specification requirements for the application to run are as follows:
 - 256MB of RAM
 - 200MB of available hard disk space
 - Monitor that supports 800 x 600 resolution or higher
 - Microsoft Internet Explorer 8.0 or later
 - MS Windows XP SP2 or later or Windows Vista or Windows 7
 - 32 bit or 64 bit PC
 - Latest .NET Framework (3.5 or higher)
 - Apple MAC computers must be partitioned and have a correct version of MS Windows installed as per above
 - Internet access to download the software and upload results
 - Scientific calculator (Cosine, Sine and Tan functions)
 - Fully paid course fees.
 - Proof of identity and PPS number (passport or driving license)
 - All other course notes and software will be provided.

Course Assessment Information

Assessment of Course

CMSE training department implement procedures for the assessment of learners, which are required to be fair and consistent. The contents of this document outline the requirements of the assessment.

Summary

Assignments (4)	50%
Examination	50%

Assignments

The training provider (CMSE Training) has devised a brief of four individual assignments that require candidates to produce evidence that demonstrate an understanding and application of a range of specific learning outcomes as identified in the course program outline:





<u>Assignment 1:</u> Calculation of building element U-values from first principles - **5%**

Assignment 2: BER assessment based on plans and specifications - **15%**

<u>Assignment 3:</u> BER of existing dwelling (trainer selected dwelling) - **15%**

Assignment 4: BER of an existing dwelling (student selected dwelling) - **15%**

Assignment File Formatting

All files for the above assignments must be submitted by e-mail to <u>info@cmse.ie</u> in either MS Word, MS Excel, PDF(Adobe Acrobat), .xml or .jpg format.

Where possible compress (Zip) the files as it reduces memory space. The contents for each assignment must be clearly identifiable as per the assignment specification sheet. Do not mix files from different assignments in the one e-mail.

Deadline for Assignments

All assignments must be submitted to <u>info@cmse.ie</u> before a candidate sits an examination. Any assignment submitted after the examination will not be assessed. CMSE Training will take into consideration any learner that applies for compassionate consideration in relation to their assessment. The learner should provide appropriate evidence to CMSE Training to support the request.

Examination

The training provider (CMSE Training) has devised an examination that covers theory and practical elements of the course.

The format of the examination is as follows:

Section A – 10 Short questions (10%) Candidates are required to answer 10 from 10 questions (1 mark each)

Section B – Practical Examination (40%)

Candidates are required to answer an examination devised by the training provider (CMSE Training) that will assess the leaner's ability to use the DEAP software in a supervised setting for a previously unseen dwelling to calculate the energy use and CO_2 emissions. Exam attendees will need to save examination files onto a USB key provided by the invigilator at the examination centre.

Exam Duration: Section A - 1 hour Section B - 2 hours





Materials required for the examination

A laptop with the correct (as identified during the course) & functioning version of DEAP software & also other software applications referenced during the course. Also required are a scientific calculator, pens, paper, your PPS number and identification.

This is an open book exam so course notes and other relevant materials are allowed in the examination.

Assessment Monitoring

All examinations will be monitored by invigilators appointed by CMSE Training. People attending the examination must follow the guidelines set out by the invigilator.

Access to Examination Room

Learners will not be allowed access to the examination 15 minutes after an examination is scheduled to start. No additional time shall be allowed to learners who arrive at the examination centre after the commencement of an examination.

Behaviour during an Examination

- Learners may not communicate in any manner with anyone other than the invigilator during the assessment.
- Learners must not use any means whatever to obtain, directly or indirectly, assistance in an assessment or give or attempt to give, directly or indirectly, such assistance to any other student.
- Learners must not indulge in any behaviour which may disturb any other student or any form of conduct which may disrupt the smooth progress of an examination. Learners causing such disturbance or disruption may be required by the invigilator to leave the examination.
- Learners are required to hand their examination papers & completed examination scripts to the invigilator, including any rough work which should be clearly indicated as such, and to remain seated at the end of the assessment until dismissed by the invigilator.
- Learners must clearly label all work handed back to the invigilator with their name and PPS no.

Authorship Statement

All candidates must submit a statement with his/her assignments clearing stating the work is their own work. The authorship statement must be signed by the candidate and must be included with each assignment.

When assignments are e-mailed to a CMSE Training e-mail address (e.g. info@CMSE.ie) the e-mail will be taken as evidence that the work submitted is the original work of the candidate and will be accepted as the Authorship statement for the assignment. The e-mail address given in the personnel details form will be taken as the official e-mail address form the candidate





Equality & Diversity

CMSE Training is committed to equality of opportunity for staff, learners, stakeholders and all underrepresented groups and to a pro-active approach to equality in the workplace. We strive to support and encourage promotion of an inclusive learning culture and fully recognize the value of diversity.

CMSE Training recognises that it has a responsibility to provide reasonable accommodation to learners who have a disability, or other persons covered by the nine grounds of Equality Legislation. An accommodation is a modification of classroom or an evaluation procedure designed to accommodate the particular needs of an otherwise qualified learner with a disability.

Please contact the Training Department in the CMSE Training office on 021-4978100 for further details

Learners with learning disabilities and special requirements

If a learner has special requirements in relation to the assessment of this course please make it known to the instructor. It is CMSE Training's policy to support any special requirements of learners during the course program & course assessment.

Access, Transfer & Progression

It is CMSE Training's intention to recognize a student's prior learning and to promote an equitable and fair admission process whilst also providing programmes of study which facilitate learners who wish to transfer or progress to other programmes leading to recognized awards.

Award/Certification

QQI Level 6 – 6N0732: http://www.seai.ie/Your_Building/BER/BER_Assessors/BER_Assessor_Training_Courses/Domestic-BER-Assessor-Training-Specification.pdf

Registration with SEAI as a BER assessor

Candidates must achieve 70% or over in each assignment <u>and</u> in each section of the examination in order to be eligible to register with SEAI.

Appeals/Repeats Process

Any learner may appeal or repeat a result of an assessment. A learner may register an appeal within 14 days of receiving a result from CMSE Training.

Assessment malpractice

Candidates found to be involved in any form of assessment malpractice will be immediately disqualified from sitting the course assessment. Some examples of assessment malpractice are:

- Cheating in the examination
- Plagiarism including copying large amounts of work from other sources and not acknowledging or referencing this work
- Pretending to be somebody else
- Fabricating evidence or results
- Failing to follow the instructions of an examination invigilator





CMSE Training will investigate any form of assessment malpractice which could impact on the validity of the assessment result.

Frequently Asked Questions

What is the course duration?

This is a 5 day course + 1 day for the final examination. These full- time intensive courses are initially scheduled to run from Monday to Friday. Candidates have to complete assignment work on their own time between the completion of the training course and their examinations.

What do I need to know in order to attend the course?

The *preferred* entry level to the course is for candidates to have a construction or trade qualification which is equivalent to at least a level 6 Construction Studies qualification

Have adequate Computer skills – this means being able to write a short report in **Word** and to use **Excel** to calculate a simple formula (such as calculating the sum of 3 numbers). Also candidates must to be able to access the internet and download documents from the internet.

What do I need to do to attend a BER course?

- Read the documentation provided about the BER course.
- Complete a CMSE Training questionnaire.
- <u>Provide copies of relevant qualifications or experience</u>. This will be needed in order to register with SEAI.
- Complete a CMSE Training booking form.
- Internet access to download the software and upload results
- Scientific calculator (Cosine, Sine and Tan functions)
- Fully paid course fees.
- Proof of identity and PPS number (passport or driving license)
- All other course notes and software will be provided.

What do I need to be eligible to register with SEAI (Sustainable Energy Ireland)?

- Successful completion of a training program, assignments and exam that meets the training specification.
- Successful completion of the National BER (NBER) exam for dwellings (details at http://www.seai.ie/Your Building/BER/BER FAQ/FAQ BER/Assessors/BER-Examinations.html
- Acceptance of the Code of Conduct for BER assessors set out by SEAI.
- Submission of a completed BER assessor application forms and copy of valid photographic ID to the issuing authority
- Submission of valid tax clearance certificate and certificate of insurance to SEAI
- Payment of the required registration fee to SEAI





What is considered a successful completion of a BER training course?

• Students must achieve over 70% in each of the assessments & exam set out at the end of the training course.

How is the CMSE Training BER course assessed?

- There are 4 assignments & 1 examination in the course
- The 4 assignments will account for 50% of the final grade
- The examination divided into 2 sections (short questions & practical exam) will account for 50% of the final grade.
- Candidates must achieve 70% in each of the assignments & exam sections to achieve the pass mark required to register with SEAI

What is the procedure to register as a BER Assessor?

Details of the registration process is posted on the SEAI web site at http://www.seai.ie/Your_Building/BER/BER_Assessors/BER_Assessors/BER_Assessor_Registration/

What are the employment/ business opportunities for BER Assessors?

CMSE Training strongly recommends that all candidates for this course work on a business plan to estimate the potential market for this qualification. It is not possible for CMSE Training to estimate the potential market for each candidate.

What is the current Status in relation to Registered BER Assessors?

As of March 2015 (according to the SEAI National register of BER Assessors) there are over 650 registered Domestic BER assessors. More than 6,500 people (including those currently registered) have successfully completed BER Assessor training courses. It is expected that some proportion of these qualified people can be expected to go on to register with SEAI. SEAI estimates that the equivalent of 1,000 full time active BER assessors would be required to meet the demands of the residential BER market.

IMPORTANT NOTE ON THE TIME SCALE FOR QQI REGISTRATION

One of the criteria to register as a BER Assessor with SEAI, is that a student must have achieved a mark of 70% on an approved BER Assessor course and have a certificate from FETAC for level 6 Building Energy Rating Assessment or equivalent.

Only students that have achieved over 70% in their assignments & examination will be put forward for certification with QQI. On registration with QQI the students will receive an eligibility ID that will allow them to register with SEAI to sit the National BER examination.

In order for results to be in place for QQI certification periods CMSE Training must have results inserted into the QQI database by the

*12 December 2015 for Year End Certification period