



Course Aim

The Certified Energy Auditor is an individual who evaluates and analyses how energy is being used in a facility, identifies energy opportunities and makes recommendations where consumption can be reduced or optimized.

The aim of this course is to prepare individuals for taking the AEE Certified Energy Auditor Examination.

Learning Outcomes

- Assess the energy consumption of an organisation.
- Analyse the energy data of the organisation to identify key trends or issues.
- Identify the areas of significant energy use for that organisation.
- Apply the principles of benchmarking the organisation against other similar organisations.
- Identify the key opportunities for energy and water improvements related to those areas of significant energy use using sound audit principles.
- Apply sound financial principles to energy management projects including life cycle costing and savings to investment analysis.
- Engage and interact in a structured energy management environment with a full understanding of the ISO 50001 energy management standard approach.
- Transition the outcome of their energy audits into a functional energy management system in line with the requirements of ISO 50001
- Undertake the role as an ESOS Lead Assessor under UK ESOS Legislation

Agenda

- Types of energy and sources of energy, law of conservation of energy, energy units, energy end use, energy tariffs & energy bills
- Types of audits, reasons for audits, energy audit process
- Establishing the energy balance and totality of energy use
- Understanding electrical energy
- Understanding thermal energy
- Control of energy systems
- Energy data
- Assessment of energy performance – methods of assessment
- Identification and selection of significant energy use
- Assessing significant energy use
- Verification of energy improvements

- Funding energy improvement programs
- Energy audit reports
- Audits of industrial/ process areas.
- Management of the audit process

Prerequisites

Candidates are required to undertake the CEA training course and examination and complete the CEA Application form. To qualify for certification following successful completion of examination individuals are required to meet one the following requirements:

- A 4 year Engineering degree, Architecture degree, Chartered Engineer or Registered Architect combined with 3 years energy related experience
- A 4 year unrelated degree, combined with 4 years energy related experience
- A Level 6 NFQ engineering related qualification combined with 8 years energy related experience
- Current status of Certified Energy Manager
- Or 10 years documented energy related experience.

Individuals that do not fully meet the energy experience requirements but do have the correct academic qualification may still apply to attend the course and sit the examination. On passing the examination they will be awarded the title of 'Certified Energy Auditor in Training' (CEA-IT). Once the relevant experience has been acquired for certification, they can then apply to have their certification upgraded (complete form) at no extra cost.

Duration

This course will be delivered over 4 days. Training will be delivered on the first 3 days and the final day will be used for review and a 4 hour examination.

Certification

The Certified Energy Auditor certification is awarded by the Association of Energy Engineers (AEE). Delegates who meet the requirements, attend the course and pass the exam will be awarded with the energy title 'Certified Energy Auditor'. This certification is one of the internationally recognised professional qualification required to undertake energy audits.

On completion of this training course, candidates should expect to receive their exam result within 30 days and certification within 60 days of examination providing all required candidate information has been received.

Who Should Attend?

The Certified Energy Auditor training course will be of interest to individuals wishing to enhance their skills in undertaking energy audits and looking to attain a recognised qualification for delivering energy audits for their clients and / or employers. This course is relevant to anyone

engaged in the energy industry or responsible for managing or operating energy using equipment and seeking to identify cost effective energy improvements such as consulting engineers, energy managers, facilities managers, plant engineers, environmental engineers, senior technicians and many more.

Trainer Profile

Director of Target Energy, Ian is also the immediate past president of the Association of Energy Engineers, (AEE)2017 .He is an approved international trainer for AEE in their Certified Energy Manager, (CEM®), Certified Energy Auditor,(CEA™) training and certification programs, and an approved Efficiency Valuation Organisation, (EVO) and AEE trainer for their Certified Measurement and Verification Professional, (CMVP®) training and Certification programs. As an Energy Engineering and Energy Management Systems expert recognised nationally and internationally he has assisted many prestigious multi-national companies in achievement of Certification to the various energy management standards including the international energy management standard ISO 50001.

Ian is the Chairman of the Irish Technical committee on Energy Management and Energy Savings (NSAI TC 59) which serves as the Irish national mirror committee (NMC) to the International committee ISO TC 301 (Energy Management and Energy Savings) which is responsible for development of the ISO 50001 Standard. He is also a strategic advisor to the Efficiency Valuation Organisation (EVO), the organisation that is responsible for development of the International Performance Measurement and Verification Protocol and is very active in delivery of energy related training and consultancy services in Ireland, UK and further afield such as USA, Canada, Ukraine, France, Germany, Greece etc. both with private industry and as an acknowledged technical expert under European support programs.

Looking to become a SEAI Registered Energy Auditor?

This Certification training course and examination from the Association of Energy Engineers, presented in association with Engineers Ireland is a method to achieve a qualification to assist energy professionals in meeting the requirements to register as an approved energy auditor with SEAI under the registered Energy Auditor scheme and also as an ESOS lead assessor in the UK.

For full details of the minimum qualifications required to be included on the SEAI Register of Energy Auditors, please click [here](#).

For Engineers Ireland members who believe they meet the required levels of experience and training and are looking for a direct route to the Certified Energy Manager examination, an application can be made via Engineers Ireland to AEE Irish Chapter to be considered for examination without undertaking the training. For further information on this, please contact the CPD Training team on 01-665-1305