



Training and Certification of Energy Professionals in Sub-Saharan Africa

AEE is global,
we bring it local.



Certified Water Efficiency Professional (CWEP®) Course

The Certified Water Efficiency Professional (CWEP®) program is designed to help educate and qualify individuals in the water/energy management field on best practices for improving water efficiency. By obtaining the CWEP®, candidates will gain industry and peer recognition by demonstrating their understanding of technical and operational water management principles.

Implementing water-efficiency often involves individuals with varied backgrounds, responsibilities, and levels of expertise. This comprehensive three-day program is designed to help educate those who have responsibilities in the sustainable or utility efficiency field on best practices for maximizing results and understanding water efficiency basics.

Attendees will learn technical and organizational strategies, including how to conduct a water efficiency site assessment, understanding water billing/costs, use of terminology, regulatory and international policies, efficiency technologies and application techniques, as well as water measurement and verification needs. The program is designed to provide the necessary training for the AEE's Certified Water Efficiency Professional (CWEP) examination for those interested in obtaining certification.

The program is also open to those who simply wish to benefit from the training provided, and do not wish to sit for the exam. By obtaining the CWEP certification however, participants will gain industry and peer recognition by demonstrating their understanding of technical and operational water efficiency principles.

COURSE OUTLINE

- Introduction to water management
- Terms, definitions & units of measure (including energy parameters associated with water);
- Regulatory frameworks, concepts & water policy
- Water billing & cost at point of use (including basic business case calculations & benchmarking);
- Water supply options, sources & types of water (including the water cycle, water standards and alternative water sources);

- Data collection and baseline water use development (including metering options, monitoring & verification basics);
- Water audit overview & processes
- Water balance development (how to track and map water in complex organisations/facilities)
- Water-efficient technologies in key areas/sectors including: Domestic plumbing systems; Landscaping and irrigation systems; Commercial kitchens; Commercial laundries; Cooling and heating systems; Hospital and laboratory equipment; Private & public pools; HVAC & mechanical equipment; Industrial processing systems; Softening & filtration systems; Sterilization, medical & lab equipment; Water supply options / alternative sources; Storm water management.

COURSE OUTCOMES

- Understand water efficiency basics
- Technical and organisational strategies
- Be able to conduct a water efficiency site assessment
- Understand water billing costs, efficiency technologies and application techniques
- Water measurement and verification techniques
- Understanding domestic, commercial, industrial water systems

DELEGATE PROFILE

This program provides an ideal training and potential career advancement opportunity for the following water efficiency professionals and management-involved professionals:

- CEMs and CEAs

- Water services & management professionals
- Provincial/state and municipal planners & government resource efficiency managers
- Energy & water administrators & utility professionals
- Sustainability professionals & energy professionals
- Government resource efficiency energy & water administration managers
- Contractors & maintenance managers, technicians and operators
- Facility managers, building technicians & operators
- Energy management professionals needing water efficiency strategies
- New facility entrants into the water efficiency field

BASIC SKILLS REQUIRED

Basic problem solving skills and calculator proficiency.

EXAMINATION

The examination and certification process is optional and you may take the course without it as well.

The examination is typically held on the morning of day 4, or any other AEE examination day. Examination questions are based on concepts and experiences contained within this program material. The exam, which must be completed within 4-hours, is open book, with a mixture of multiple choice and true/false questions.

This is a voluntary exam and delegates must book for the examination and submit a certification application form before taking the exam and the course. The examination may only be taken after completion of the prescribed AEE CWEP® training at a licensed AEE training provider.

Note that exam results will only be issued once candidate is in full standing with EnTF.

ELIGIBILITY FOR CWEP® CERTIFICATION

The pre-requisites to qualify for the certification process have been designed to take into account the possible diversity of education and practical experience an individual may have. However, each CWEP® candidate must attend the CWEP® training program, pass the CWEP® 4-hour written examination with 70%, and meet one of the following criteria:

Education and Experience

- 2-year technical degree or 4-year degree OR
- 1-year related* experience OR
- Current status of Certified Energy Manager (CEM®), Business Energy Professional (BEP), or Energy Efficiency Practitioner (EEP) OR
- Currently employed at company in related* field

**Related experience in water efficiency, energy management, or operations and maintenance of a building or facility.*

- Certification is required every 3 years which is subject to participation in the AEE continuing education program.

STEPS TO CERTIFICATION

1. Register to attend the AEE training course with a licensed training

provider of the AEE.

2. Register to sit the AEE examination for your certification, complete the certification application and return it to the Certification Coordinator at the EnTF.
3. Attend 85% or more in-class training.
4. Pass the examination with 70% or more.
5. Your examination mark and certification application will be reviewed by the AEE African Certification Board for your applied certification.
6. Your application with African Board recommendations will be submitted to AEE's International Certification Board for approval.
7. Should you receive feedback that you may only receive 'in-training' status, you may upgrade to full certification status once you have achieved sufficient levels of experience, and as long as this is within 6 years.
8. You will receive notification for renewal on a 3 yearly basis.

RECOGNITION

Engineering Council of South Africa (ECSA)

3 Continuing Professional Development (CPD) credits for ECSA registration for attending the training course and 1 additional CPD credit for sitting the international AEE examination.

Association of Energy Engineers (AEE)

3.2 credits for Continuing Professional Competency (CPC) demonstration to re-certify on another AEE certification program.

International certification with the AEE

International AEE certification will be listed in the AEE Professionals Directory on-line, once approved by AEE.

Attendance certificate

Attendance certificate will be issued to all delegates that attend the full duration of the training course. (85% or higher attendance required.)

COSTS*

Course only fee:
R10 700.00 (excl VAT)

Examination and Certification Application fee:
R3 200.00 (excl VAT)

Examination rewrite fee: R2 700.00 (excl VAT)
Optional full colour manual: R2 600.00 (excl VAT)

Course fee includes: 3 day training course, attendance certificate, black and white manual, one year SAEEC membership, lunch, teas and coffees.

Examination and Certification application fee includes: Four hour examination sitting, tea/coffee and snack, marking and proctoring fee, peer reviewed certification application, AEE certificate, certification ceremony in SA, one year AEE membership for first certifications.

BOOKINGS

Book online at www.energytrainingfoundation.co.za for your training and examination. You will receive confirmation from the Training Administrator with all the necessary arrangements and information.

* Terms and conditions

1. First paid first served policy applies for booking security
2. Booking security requires one of the following to be received six (6) working days prior to the commencement of the course:
 - a. Full payment cleared in bank with proof of payment supplied.
 - b. A deposit of 25% with proof of payment supplied.
 - c. A purchase order for the full amount of the invoice.
3. Fees include coffee/tea/juice on arrival, mid-morning coffee/tea with pastries, mid-afternoon coffee/tea with biscuits, and lunch. For training the fee includes the black and white text books, course fee and one year membership of the SAEEC. For examinations the fee includes the
 - a. Invoices exclude withholding and country-specific taxes. Should these be leveraged by your country government, we reserve the right to invoice the responsible entity/person to recoup the costs.
 - b. VAT is payable for candidates attending training in South African borders, this may be claimed on departure from South Africa using the tax invoice.
4. It is the responsibility of the candidate attending the course to arrange their own travel, accommodation, breakfast and dinner.
5. Policy on international candidates
 - a. Policy on cancellations

- a. Cancellations received within five (5) working days prior to the first day of training will carry a 25% cancellation fee. No course material will be supplied. For examinations a rescheduling fee of R650.00 will be leveraged.
- b. Cancellations received six (6) working days prior to the first day of training will receive a full refund.
7. Policy on accounts not in good standing

- a. The candidate in attendance at the course ultimately remains responsible for payment of the outstanding account and providing the proof of payment thereof.
- b. In the event that a candidate, or the candidate's organisation is not in good standing with us we reserve the right to withhold:
 - Certificates of Attendance

- Course Attendance Registers
- Issuing of ECSA CPD credits
- Examination Results
- AEE Certification Application and/or Renewal Submissions
- AEE Certification Certificates
- Listing on the AEE website
- 8. The Energy Training Foundation (EnTF) is a division of Energy Cybernetics (Pty) Ltd, an EOH company, and the invoice will be made out by Energy Cybernetics.
- 9. Proforma invoices will be supplied, Tax Invoices will be raised on request but these are payable within 30 days of issue.
- 10. Right of Admission Reserved.

About the Energy Training Foundation

The EnTF offers tailor-made training courses to fulfil the energy training needs of the industrial, commercial, mining, government, utility, building sector of Africa. EnTF is the sole approved training partner of the AEE for the Southern African region and Indian Ocean Islands, the training partner of the SAEEC and the AEPEA, is an EWSETA accredited training provider, with course accreditation for CPD registration requirements with ECSA.

Programs offered by EnTF include customised training programs, mentorship and stipend management programs, locally developed training and internationally accredited certification programs. The most popular: Certified Energy Manager (CEM), Certified Energy Auditor (CEA), Certified Measurement and Verification Professional (CMVP), Certified Water Efficiency Professional (CWEP), Certified Renewable Energy Professional (REP), Certified Business Energy Professional (BEP), Certified Carbon Reduction Manager (CRM), Fundamentals of Energy Management (FEMT), Basic Principles of Energy (BPO), Measurement and Verification Standard Training (MVST), Nelson Mandela University PV Technologies short learning program (PVTECH).

Energy Training Foundation is a division of Energy Cybernetics (Pty) Ltd, an EOH company.

For more information: • info@entf.co.za • 084 622 4770/084 011 5500 • www.entf.co.za