



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, new facility
- 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 at 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 AEPEA.

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.

* 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 AEPEA. For examinations the fee includes the examination fee, marking fee, certification application fee, and 1 year membership of AEE for first certifications.
4. It is the responsibility of the candidate attending the course to arrange their own travel, accommodation, breakfast and dinner.
 6. Policy on accounts not in good standing
 - a. The candidate in attendance at the course ultimately

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

Association of Energy Professionals Eastern Africa

You will gain CPD points for your professional development recognized by Engineers Board of Kenya or other relevant bodies.

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:

Ksh100 000.00

Examination and Certification application fee:

Ksh60 000.00

Examination rewrite fee: Ksh30 000.00

Fee includes: 3 day training course, 2 day practical, attendance certificate, black and white manual, one year AEPEA membership, lunch, teas and coffees, four hour examination sitting, tea/coffee and snack, marking and proctoring fee, peer reviewed certification application and for successful candidates: AEE certificate, one year AEE membership for first certifications.

BOOKINGS

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

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 Sub-Saharan 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. EnTF is the energy division of Faculty Training Institute (Pty) Ltd.

AEPEA is the second chapter of AEE and a training partner with EnTF.

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 (BPE), Measurement and Verification Standard Training (MVST), Nelson Mandela University PV Technologies short learning program (PVTECH).