



Training and Certification of Energy Professionals in Sub-Saharan Africa

AEE is global,
we bring it local.



ECSA CPD
4 credits

AEE CPC
4.8 credits

REP

REP

Certified Renewable Energy Professional (REP®)



The REP® program is designed to recognise the expertise and experience of professionals involved in the specification and application of renewable and alternative energy technologies, assessment of renewable energy projects, and development of achievable low-carbon and sustainability goals for organisations.

REP® is an international qualification program for professionals by the Association of Energy Engineers (AEE), based in the USA. AEE programs distinguish the most qualified professionals that have demonstrated high levels of experience, competence and specialised knowledge in their respective fields of certification.

The REP® course explores the various forms of low-carbon energy sources, as well as the environmental impacts of alternative energy. Acquire the skills and theory to be able to provide credible and sustainable solutions in the renewable and alternative energy sector. REP® is presented over 3 days and followed by a voluntary examination on the 4th day which could lead to international certification with the AEE.

TRAINING PROGRAMME OUTLINE

- Renewable energy basics
- The latest developments in wind power systems, solar thermal heating, photovoltaic generation, geothermal heating, electrical production, biofuels, waste-to-energy systems, energy storage, fuel cells, hydroelectric power, ocean thermal energy
- Assessments of the various forms of renewable energy
- Case examples of renewable energy projects
- Strengths and weaknesses of renewable energy applications
- Using renewable energy solutions in building applications
- Opportunities for using renewable energy
- Strategies for making a business case for using renewables
- Economic issues, financial methodologies and incentives
- Approval processes

- Installation
- Lessons learned and pitfalls to avoid

COURSE OUTCOMES

Delegates will have a full understanding of the range of renewable energy resources available, be able to assess the applicability of each for suitable applications, and understand the economic issues surrounding renewables within the business environment.

DELEGATE PROFILE

- Persons with energy management, or renewable and alternative energy experience, who require a recognised qualification within the energy engineering career path.
- For architects, built environment graduates, engineering graduates, environmental graduates the REP® will open new doors to one of the fastest growing industries in the world.
- Persons that require recognition as a professional that stays up to date on the latest developments in the renewable energy industry by participating in continued education that is internationally recognised.
- For persons that have to find ways of saving energy and providing alternative means of energy through biomass, biofuel, solar, or other renewable and alternative sources.

BASIC SKILLS REQUIRED

The REP® training course is at a level which assumes the delegate has basic problem-solving skills, including quick and accurate use of a hand calculator.

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 REP® 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 CERTIFICATION

The prerequisites 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 REP® candidate must attend the full REP® training program, pass the REP® 4-hour written open book examination with 70%, and meet one of the following criteria:

Education and Experience

- 4-year related* degree OR Professional Engineer (PE/PrEng) OR Registered Architect (RA) AND 2+ years related* experience
- 2-year associate degree; Diploma, BTech AND 5+ years related* experience
- No qualification AND 10+ years related* experience
- Current status of Certified Energy Manager (CEM®)
- Re-certification is required every 3 years subject to participation in the AEE continuing education program (CEP).

**Related degree includes engineering, architecture, science, business, or related and related experience includes renewable, alternative energy, biomass, biofuel, solar or related.*

If you do not meet one of the eligibility criteria above, you can still apply for an in-training certification, REP-IT. In order to gain the in-training certification, you must attend a REP preparatory training seminar, submit the REP certification application, and pass the REP certification examination. The REP-IT certification is valid for six years, which allows you time to meet the full REP certification eligibility requirements.

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.

* Terms and conditions

1. First paid first served policy applies for booking security
2. Booking security requires 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 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.
5. Policy on international candidates
 - 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.
6. Policy on cancellations

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 qualification 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.

1 additional CPD credit for ECSA registration for passing the international AEE examination.

Association of Energy Engineers (AEE)

4.8 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 certification.

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.

- 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