

COURSE OVERVIEW EE0409
Certified Energy Professional

Course Title

Certified Energy Professional

Course Reference

EE0409

Course Duration/Credits

Five days/3.0 CEUs/30 PDHs



Course Date/Venue

Session(s)	Date	Venue
1	May 04-08, 2025	Safir Meeting Room, Divan Istanbul, Turkey
2	May 11-15, 2025	Slaysel 02, Meeting Room, Movenpick Hotel & Resort Al Bida'a, Kuwait
3	August 03-07, 2025	Boardroom 1, Elite Byblos Hotel Al Barsha, Sheikh Zayed Road, Dubai, UAE
4	November 03-07, 2025	Fujairah Meeting Room, Grand Millennium Al Wahda Hotel, Abu Dhabi, UAE

Course Description



This practical and highly-interactive course includes real-life case studies and exercises where participants will be engaged in a series of interactive small groups and class workshops.



This course is designed to provide participants with a detailed and up-to-date overview of energy management. It covers the need for energy management; the energy audit, audit reports and energy audit instrumentation; the energy codes, standards and protocols; the energy purchasing, accounting and benchmarking; the energy and electricity rate structures; the electrical systems, electric energy management, economic analysis and life cycle costing; the lighting basics and lighting system improvements; and the electric motors, industrial systems and thermal energy storage.



During this interactive course, participants will learn the boilers and thermal systems improvement; the waste heat, co-generation and CHP systems; the renewable energy sources and maintenance programs; building commissioning, automation and control systems; the M&V, alternative financing, green buildings and LEED; and the various units, conversions, charts, tables and acronyms provided.

Course Objectives

Upon the successful completion of this course, each participant will be able to:-

- Get certified as a “*Certified Energy Professional*”
- Recognize the need for energy management as well as conduct energy audit, audit reports and energy audit instrumentation
- Explain energy codes, standards and protocols as well as energy purchasing, accounting and benchmarking
- Discuss energy and electricity rate structures and carryout electrical systems, electric energy management, economic analysis and life cycle costing
- Determine lighting basics and lighting system improvements as well as electric motors, industrial systems and thermal energy storage
- Apply boilers and thermal systems improvement and discuss waste heat, co-generation and CHP systems
- Identify renewable energy sources and employ maintenance programs and building commissioning, automation and control systems
- Describe M&V, alternative financing, green buildings and LEED
- Enumerate various units, conversions, charts, tables and list of acronyms provided

Exclusive Smart Training Kit - H-STK®



Participants of this course will receive the exclusive “Haward Smart Training Kit” (H-STK®). The H-STK® consists of a comprehensive set of technical content which includes **electronic version** of the course materials conveniently saved in a **Tablet PC**.

Who Should Attend

This course is designed for energy professionals including production, maintenance, safety, environment and quality department engineers and section heads.

Training Methodology

All our Courses are including **Hands-on Practical Sessions** using equipment, State-of-the-Art Simulators, Drawings, Case Studies, Videos and Exercises. The courses include the following training methodologies as a percentage of the total tuition hours:-

- 30% Lectures
- 20% Practical Workshops & Work Presentations
- 30% Hands-on Practical Exercises & Case Studies
- 20% Simulators (Hardware & Software) & Videos

In an unlikely event, the course instructor may modify the above training methodology before or during the course for technical reasons.

Course Certificate(s)

(1) Internationally recognized Competency Certificates and Plastic Wallet Cards will be issued to participants who completed a minimum of 80% of the total tuition hours and successfully passed the exam at the end of the course. Successful candidate will be certified as a “*Certified Energy Professional*”. Certificates are valid for 5 years.

Recertification is FOC for a Lifetime.

Sample of Certificates

The following are samples of the certificates that will be awarded to course participants: -





- (2) Official Transcript of Records will be provided to the successful delegates with the equivalent number of ANSI/IACET accredited Continuing Education Units (CEUs) earned during the course.

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Haward Technology Middle East

Continuing Professional Development (HTME-CPD)



CEU Official Transcript of Records

TOR Issuance Date: 16-Nov-21

HTME No. 74851

Participant Name: Waleed Al Habeeb

Program Ref.	Program Title	Program Date	No. of Contact Hours	CEU's
EE0409	Certified Energy Professional	November 12-16, 2021	30	3.0

Total No. of CEU's Earned as of TOR Issuance Date **3.0**

TRUE COPY



Jaryl Castillo
Academic Director

Haward Technology has been approved as an Authorized Provider by the International Association for Continuing Education and Training (IACET), 2201 Cooperative Way, Suite 600, Herndon, VA 20171, USA. In obtaining this approval, Haward Technology has demonstrated that it complies with the ANSI/IACET 1-2013 Standard which is widely recognized as the standard of good practice internationally. As a result of their Authorized Provider membership status, Haward Technology is authorized to offer IACET CEUs for programs that qualify under the ANSI/IACET 1-2013 Standard.

Haward Technology's courses meet the professional certification and continuing education requirements for participants seeking Continuing Education Units (CEUs) in accordance with the rules & regulations of the International Association for Continuing Education & Training (IACET). IACET is an international authority that evaluates programs according to strict, research-based criteria and guidelines. The CEU is an internationally accepted uniform unit of measurement in qualified courses of continuing education.

Haward Technology is accredited by









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Certificate Accreditations (For Normal courses)

Certificates are accredited by the following international accreditation organizations: -

-  British Accreditation Council (BAC)

Haward Technology is accredited by the **British Accreditation Council** for **Independent Further and Higher Education** as an **International Centre**. BAC is the British accrediting body responsible for setting standards within independent further and higher education sector in the UK and overseas. As a BAC-accredited international centre, Haward Technology meets all of the international higher education criteria and standards set by BAC.

-  The International Accreditors for Continuing Education and Training (IACET - USA)

Haward Technology is an Authorized Training Provider by the International Accreditors for Continuing Education and Training (IACET), 2201 Cooperative Way, Suite 600, Herndon, VA 20171, USA. In obtaining this authority, Haward Technology has demonstrated that it complies with the **ANSI/IACET 2018-1 Standard** which is widely recognized as the standard of good practice internationally. As a result of our Authorized Provider membership status, Haward Technology is authorized to offer IACET CEUs for its programs that qualify under the **ANSI/IACET 2018-1 Standard**.

Haward Technology's courses meet the professional certification and continuing education requirements for participants seeking **Continuing Education Units (CEUs)** in accordance with the rules & regulations of the International Accreditors for Continuing Education & Training (IACET). IACET is an international authority that evaluates programs according to strict, research-based criteria and guidelines. The CEU is an internationally accepted uniform unit of measurement in qualified courses of continuing education.

Haward Technology Middle East will award **3.0 CEUs** (Continuing Education Units) or **30 PDHs** (Professional Development Hours) for participants who completed the total tuition hours of this program. One CEU is equivalent to ten Professional Development Hours (PDHs) or ten contact hours of the participation in and completion of Haward Technology programs. A permanent record of a participant's involvement and awarding of CEU will be maintained by Haward Technology. Haward Technology will provide a copy of the participant's CEU and PDH Transcript of Records upon request.

Accommodation

Accommodation is not included in the course fees. However, any accommodation required can be arranged at the time of booking.

Course Instructor(s)

This course will be conducted by the following instructor(s). However, we have the right to change the course instructor(s) prior to the course date and inform participants accordingly:



Mr. Ken Steel is a **Senior Electrical & Instrumentation Engineer** with over **30 years** of extensive experience. His expertise widely covers **Energy Industry, Electrical Motors Testing, Heat Tracing & Insulation Installation & Testing, HV Terminations, High & Low Voltages** on Overhead Cranes, **HV/MV Cable Splicing, Cable & Over Head Power Line, HV/MV Switchgear, HV Cable Design, Medium & High Voltage Equipment, High Voltage Circuit Breaker Inspection & Repair, High Voltage Power System, HV Equipment**

Inspection & Maintenance, HV Switchgear Operation & Maintenance, Resin / Heat Shrink & Cold Shrink Joints, HV/LV Equipment, LV & HV Electrical System, Cable Splicing & Termination, High Voltage Electrical Safety, LV, MV & HV Cable Installations & Properties, LV Substation, MV & LV Cable, UPS Systems, MV & LV Direct on Line Motor Drives, MV & LV VSD Motor Drives, MV & LV Soft Starter Motor Drives, LV Two Speed Motor Drives, Underground Transformer Oil Containment Tank, Electrical & Instrumentation Construction Installation, 1500KW, 1000KW, 1752KW Diesel Power Plant Installation, 110KV Overhead Line, 110KV Outdoor Switchgear, 110KV/10KV 6500KVA Transformer, Transformer Substation, 1600KVA 10KV/0.4KV & 2 Off 1000KVA Diesel Generators, 1600KVA 10KV/0.4KV & 1650KVA Diesel Generator, 110KV/35KV/10KV Substation, 110KV/10KV Transformers, 110KV & 2 Off 6KV Overhead Lines, 34.5KV, 13.8KV, 4.16KV & 480V Switchgear, 4.16KV & 480V MCC, Transformers & Motor Drives Substations, Diesel Driven Generators, Overhead Cranes, Overhead Cranes & HVAC Units, AC & DC Drives, Data Logger, Electrical, Instrumentation & Mechanical Installation Maintenance, Slab Mills, Pre Heat Ovens, Hydraulic Shears, Stamping Machine, Gearboxes, Rollers, Pumps, Valves, Electro Magnets & Pump House Operation, Boilers Construction And Commissioning, Valve Calibration & Testing, Level Gauges, Pressure & Flow Transmitters Installation & Calibration, Pressure & Leak Testing of Boilers, Leak Testing, SMP, Elect, I&C, F&G, HVAC & Utility Services, Nitrogen Leak Test Operations, Steam Blowing Activities, SMP, Elect, I&C, F&G, HVAC & Utility Services, PTW Issue (PA/AC), Installation & Mechanical Piping and Hydro Testing & Leak Testing of Lines Installation.

During Mr. Steel's career life, he has gained his practical experience through several significant positions and dedication as the **3GP PBF & Boilers SC Commission Support, SC Site Execution Superintendent, E&I Construction Superintendent, High Voltage Construction Supervisor, Control & Power Construction Supervisor, Electrical & Instrumentation Supervisor, Electrical Technician, Construction Support Electrical Engineer, E&I Engineer, Electrical/Instrumentation Site Supervisor, Q.A/Q.C Inspector, Electrical/ Instrumentation Technician, Maintenance Fitter Instrumentation Technician, Millwright, Apprentice Millwright and Senior Instructor/Lecturer** for Tengiz Chevron Oil Kazakhstan, Al Jubail Saudi Arabia, Escravos Delta state Nigeria, Lurgi S.A, SuD Chemie Sasol Catalysts, J C Groenewalds Construction (LTA), Tycon (Goodyear S.A.), Dragline Construction and Iscor Vanderbijlpark.

Mr. Steel has a **Diploma in Electronics Mechanic**. Further, he is a **Certified Instructor/Trainer** and delivered numerous trainings, courses, workshops, seminars and conferences internationally.



Course Fee

Istanbul	US\$ 6,000 per Delegate + VAT . This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day
Kuwait	US\$ 5,500 per Delegate + VAT . This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day
Dubai	US\$ 5,500 per Delegate + VAT . This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day
Abu Dhabi	US\$ 5,500 per Delegate + VAT . This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day

Course Program

The following program is planned for this course. However, the course instructor(s) may modify this program before or during the course for technical reasons with no prior notice to participants. Nevertheless, the course objectives will always be met:

Day 1

0730 – 0800	<i>Registration & Coffee</i>
0800 – 0815	<i>Welcome & Introduction</i>
0815 – 0830	PRE-TEST
0830 – 0900	<i>The Need for Energy Management</i>
0900 – 0915	<i>Break</i>
0915 – 1115	<i>Conducting an Energy Audit, Audit Reports & Energy Audit Instrumentation</i>
1115 – 1230	<i>Conducting an Energy Audit, Audit Reports & Energy Audit Instrumentation (cont'd)</i>
1230 – 1245	<i>Break</i>
1245 – 1420	<i>Energy Codes, Standards & Protocols</i>
1420 – 1430	Recap
1430	<i>Lunch & End of Day One</i>

Day 2

0730 – 0900	<i>Energy Purchasing, Accounting & Benchmarking</i>
0900 – 0915	<i>Break</i>
0915 – 1130	<i>Energy & Electricity Rate Structures</i>
1130 – 1230	<i>Electrical Systems & Electric Energy Management</i>
1230 – 1245	<i>Break</i>
1245 – 1420	<i>Economic Analysis & Life Cycle Costing</i>
1420 – 1430	Recap
1430	<i>Lunch & End of Day Two</i>

Day 3

0730 – 0900	<i>Lighting Basics & Lighting System Improvements</i>
0900 – 0915	<i>Break</i>
0915 – 1045	<i>Electric Motors & Industrial Systems</i>
1045 – 1230	<i>Thermal Energy Storage</i>





1230 – 1245	Break
1245 – 1420	Boilers & Thermal Systems Improvement
1420 – 1430	Recap
1430	Lunch & End of Day Three

Day 4

0730 – 0900	Waste Heat, Co-Generation, CHP Systems
0900 – 0915	Break
0915 – 1045	Renewable Energy Sources
1045 – 1230	Maintenance Programs & Building Commissioning
1230 – 1245	Break
1245 – 1420	Building Automation & Control Systems
1420 – 1430	Recap
1430	Lunch & End of Day Four

Day 5

0730 – 0900	M&V & Alternative Financing
0900 – 0915	Break
0915 – 1045	Green Buildings & LEED
1045 – 1200	Units & Conversions
1200 – 1215	Break
1215 – 1300	Charts, Tables & List of Acronyms
1300 – 1315	Course Conclusion
1315 – 1415	COMPETENCY EXAM
1415 – 1430	Presentation of Course Certificates
1430	Lunch & End of Course

Practical Sessions

This practical and highly-interactive course includes real-life case studies and exercises:-



Course Coordinator

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