COURSE OVERVIEW EE0452
Certified Switchman: High Voltage Switching Operations

Course Title
Certified Switchman: High Voltage Switching Operations



Course Date/Venue
Session 1: March 21-25, 2027/Meeting Plus 9, City Centre Rotana, Doha, Qatar
Session 2: July 25-29, 2027/Meeting Plus 9, City Centre Rotana, Doha, Qatar

Course Reference
EE0452



Course Date/Venue
Five days/3.0 CEUs/30 PDHs

Course Description



This practical and highly-interactive course includes various practical sessions where participants will be engaged in HV/LV power switching and other working practices.



This course is designed to provide participants with a detailed and up-to-date overview of High Voltage Switching: Safety, Operations & Maintenance. It covers the legislation and standards of high voltage switching operations; the risk management and control as well as the proper approach to high voltage-safe systems of work, permit types and permit procedures; operating local high voltage and low voltage switchgear; developing high voltage switchgear program; controlling permit to work operations; performing switching to a switching program; coordinating and directing switching program; and working safely near live electrical apparatus.



During this interactive course, participants will learn the access procedures to work on or near electrical network infrastructure; the HV field switching operation and power system substation switching operation to a given schedule; developing high voltage switching schedule; coordinating power systems permit procedures; directing power system switching schedules; and solving the energy supply network equipment problems in a professional manner.

Course Objectives/Outcomes & Benefits for the Participants

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

- Get certified as a "*Certified Switchman*"
- Review the legislation and standards of high and medium voltage switching operations
- Carryout risk management and control as well as the proper approach to high and medium voltage-safe systems of work, permit types and permit procedures
- Operate high voltage, discuss MV marine 6.6 kV switchgear systems and develop high voltage switchgear program
- Apply control permit to work operations, perform switching to a switching program as well as coordinate and direct switching program
- Work safely near live electrical apparatus
- Apply access procedures to work on or near electrical network infrastructure
- Perform HV field switching operation and power system substation switching operation to a given schedule
- Develop high voltage switching schedule and coordinate power systems permit procedures and direct power system switching schedules
- Solve energy supply network equipment problems in a professional manner

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 provides an overview of all significant aspects and considerations of high voltage switching: safety, operations and maintenance for electrical workers and engineers working with high and low voltage switchgear in industrial facilities and networks.

Training Methodology

Our courses employ an interactive, learner-centred methodology that integrates theoretical knowledge with practical application. The training is delivered through a suitable combination of some or all of the following methods, selected according to the course content and learning objectives:

- Instructor-led presentations and facilitated discussions
- Practical workshops and participant presentations
- Hands-on exercises and real-world case studies
- Equipment demonstrations and technical drawings
- Hardware- and software-based simulations
- Gamification & Role Play in soft-skills courses only
- Virtual Reality (VR) and Augmented Reality (AR)
- Instructional videos and other relevant training resources

This blended approach encourages active participation, strengthens practical skills and supports the effective application of acquired knowledge in the workplace.

Learning Design & Customization

This course can be customized to the exact requirements of clients. Haward Technology is so proud of our huge capabilities in tailoring our courses to the training needs of our valued clients.

Course Certificate(s)

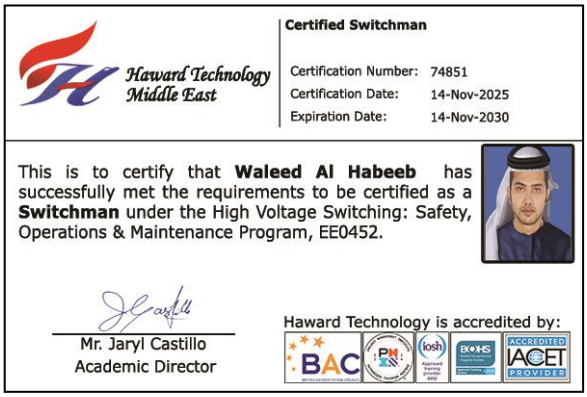
(1) Internationally recognized Competency Certificates and Plastic Wallet Cards will be issued to participants who completed a minimum of 80% of the total tuition hours and successfully passed the exam at the end of the course. Successful candidate will be certified as a "*Certified Switchman*". Certificates 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.



Haward Technology Middle East

Continuing Professional Development (HTME-CPD)

CEU Official Transcript of Records

TOR Issuance Date: 14-Nov-25

HTME No. 74851

Participant Name: Waleed Al Habeeb

Program Ref.	Program Title	Program Date	No. of Contact Hours	CEU's
EE0452	High Voltage Switching: Safety, Operations & Maintenance	Nov 10-14, 2025	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 Accredited 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 1-2018 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 1-2018 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

P.O. Box 26070, Abu Dhabi, United Arab Emirates | Tel.: +971 2 3091 714 | E-mail: info@haward.org | Website: www.haward.org

Certificate Accreditations

Haward's 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**. Haward's certificates are internationally recognized and accredited by the British Accreditation Council (BAC). 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.

Course Fee

US$ 6,000 per Delegate. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

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. Pan Marave, PE, MSc, BEng, is a **Senior Electrical & Instrumentation Engineer** with over **30 years** of extensive experience in **Oil**, **Gas**, **Petrochemical**, **Refinery** & **Power** industries. His expertise includes Safety Instrumented Systems (**SIS**), Safety Integrity Level (**SIL**), Emergency Shutdown (**ESD**); **DCS**, **SCADA** & **PLC**; **Measurement** (**Flow**, **Temperature**, **Pressure**); **Process Analyzers** & **Analytical Instrumentation**; **Process Control**, **Instrumentation** & **Safeguarding**; **Process Controller**, **Control Loop & Valve Tuning**; Industrial **Distribution Systems**; Industrial **Control & Control Systems**, Power Systems **Protection & Relaying**; **Earthing**, **Bonding**, **Grounding**, **Lightning & Surge Protection**; Electric Power **Substation** & **Systems**; Electrical Engineering Principles; **Motor Control Circuit**; **Electrical Fault Analysis**; Electrical Networks & Distribution **Cables**; **Circuit Breakers**, **Switchgears**, **Transformers**, **Hazardous Areas Classification** and **Detailed Engineering Drawings**, **Codes** & **Standards**. Furthermore, he is also well-versed in Microprocessors Structure, Lead Auditor (**ISO 9000:2000**), **ISO 9002**, Quality Assurance, and Projects & Contracts Management.

Presently, Mr. Marave is the **Technical Advisor** of **Chamber of Industry & Commerce** in Greece. Prior to this, he gained his thorough practical experience through several positions as the **Technical Instructor**, **Engineering Manager**, **Electronics & Instruments Head**, **Electrical**, **Electronics & Instruments Maintenance Superintendent**, **Assistant General Technical Manager** and **Engineering Supervisor** of various international companies such as the **Alumil** Mylonas, **Athens Papermill**, **Astropol** and the **Science Technical Education**.

Mr. Marave is a **Registered Professional Engineer** and has **Master's** and **Bachelor's** degrees in **Electrical Engineering** from the **Polytechnic Institute of New York** and **Pratt Institute of New York** (**USA**) respectively. Further, he is a **Certified Instructor/Trainer**, a **Certified Internal Verifier/Assessor/Trainer** by the **Institute of Leadership & Management** (**ILM**) and an active member of the **Technical Chamber** and the Institute of Electrical and Electronics Engineer (**IEEE**) in Greece. He has presented and delivered **numerous international** courses, conferences, trainings and workshops worldwide.

Course Program

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

Day 1

0730 – 0800	*Registration & Coffee*
0800 – 0815	*Welcome & Introduction*
0815 – 0830	***PRE-TEST***
0830 – 0930	***Legislation & Standards***
0930 – 0945	*Break*
0945 – 1030	***Risk Management & Control***
1030 – 1130	***Approach to High & Medium Voltage – Safe Systems of Work, Permit Types & Permit Procedures***
1130 – 1215	***HV Switchgear***
1215 – 1230	*Break*
1230 – 1330	***MV Marine 6.6 kV Switchgear System***
1330 – 1420	***Develop HV Switchgear Program***
1420 – 1430	***Recap***
1430	*Lunch & End of Day One*

Day 2

0730 – 0830	***Control Permit to Work Operations***
0830 - 0930	***Perform Switching to a Switching Program***
0930 – 0945	*Break*
0945 – 1100	***Coordinate & Direct Switching Program***
1100 – 1215	***Working Safely near Live Electrical Apparatus***
1215 – 1230	*Break*
1230 – 1330	***Apply Access Procedures to Work on or Near Electrical Network Infrastructure***
1330 – 1420	***Perform HV Field Switching Operation to a Given Schedule***
1420 – 1430	***Recap***
1430	*Lunch & End of Day Two*

Day 3

0730 – 0830	***Perform Power System Substation Switching Operation to a Given Schedule***
0830 – 0930	***Develop High Voltage Switching Schedule***
0930 – 0945	*Break*
0945 – 1100	***Coordinate Power Systems Permit Procedures***
1100 – 1215	***Coordinate & Direct Power System Switching Schedules***
1215 – 1230	*Break*
1230 – 1420	***Solve Problems in Energy Supply Network Equipment***
1420 – 1430	***Recap***
1430	*Lunch & End of Day Three*

Day 4

0730 – 0830	***Practical Sessions*** *Switching Programs*
0830 – 0930	***Practical Sessions (cont'd)*** *Isolation Certificates*

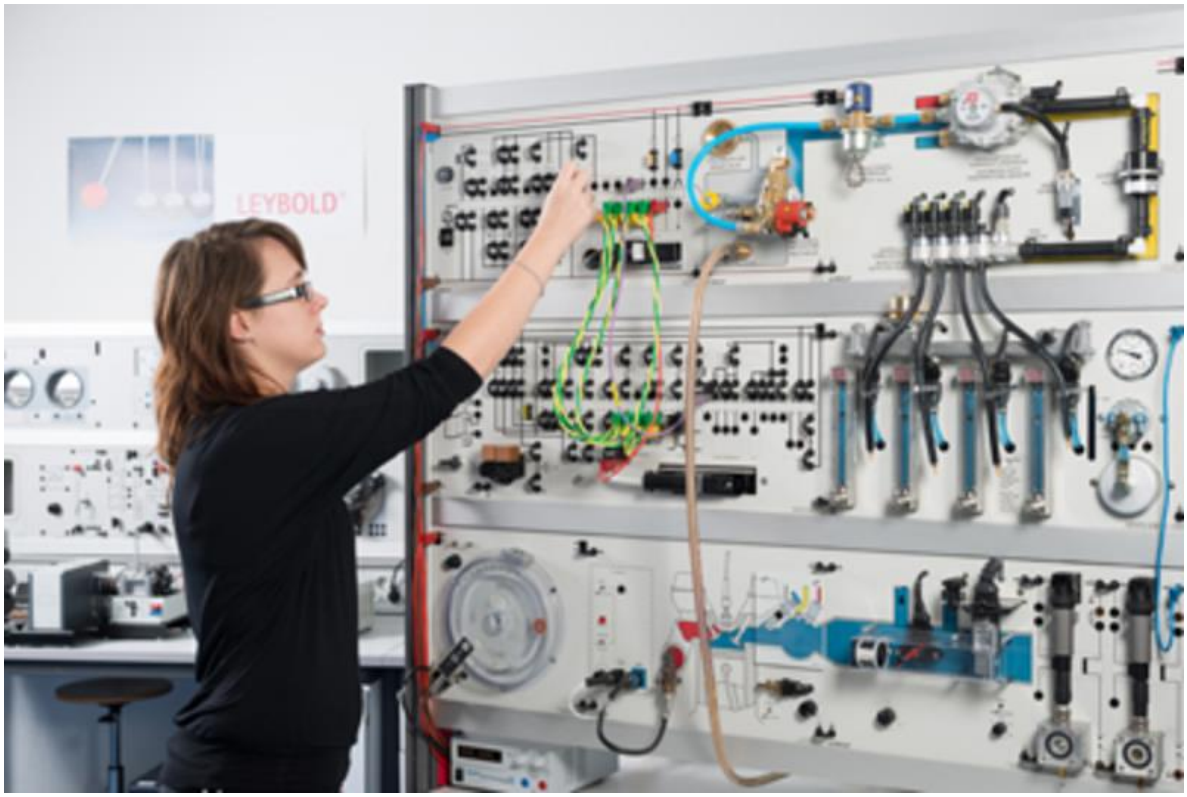
0930 – 0945	*Break*
0945 – 1100	***Practical Sessions (cont'd)*** *Electrical Permit to Work*
1100 – 1215	***Practical Sessions (cont'd)*** *Danger Notices & Pre-Cautions*
1215 – 1230	*Break*
1230 – 1330	***Practical Sessions (cont'd)*** *Sanction for Test*
1420 – 1430	***Recap***
1430	*Lunch & End of Day Four*

Day 5

0730 – 0930	***Practical Sessions (cont'd)*** *Log-Out & Tag-Out*
0930 – 0945	*Break*
0945 – 1100	***Practical Sessions (cont'd)*** *Safe Key Systems*
1100 – 1200	***Practical Sessions (cont'd)*** *Electrical Safety Systems- Interlocks-Earthing-Isolation & Access Control*
1200 – 1215	*Break*
1215 – 1245	***Practical Sessions (cont'd)*** *Fault Reports*
1245 – 1300	***Course Conclusion*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Course Topics that were Covered During the Course*
1300 – 1400	***COMPETENCY EXAM***
1400 – 1415	*Evaluation of Competency Exam*
1415 – 1430	*Presentation of Course Certificates*
1430	*Lunch & End of Course*

Practical Sessions (Online-Virtual)

This practical and highly-interactive course includes the following practical sessions using Haward's HV Switchgears:-



(1) Switching Programs
(2) Isolation Certificates
(3) Electrical Permit to Work
(4) Danger Notices & Pre-Cautions
(5) Sanction for Test
(6) Lock-Out & Tag-Out
(7) Safe Key Systems
(8) Electrical Safety Systems-Interlocks-Earthing-Isolation & Access Control
(9) Fault Reports

Course Coordinator

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