

## **COURSE OVERVIEW EE0452 HV Switching**

## **Course Title HV** Switching

#### **Course Date/Venue**

October 05-09, 2025/Boardroom 2, Elite Byblos Hotel Al Barsha, Sheikh Zayed Road, Dubai, UAE

# Course Reference

EE0452

## **Course Date/Venue**

Five days/3.0CEUs/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 operations. 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 controlling permit to work program; operations; switching performing to switching program; а 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**

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 voltage switching operations
- Carryout risk management and control as well as the proper approach to high voltage-safe systems of work, permit types and permit procedures
- Operate local high voltage and low voltage switchgear 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**<sup>®</sup>). The **H-STK**<sup>®</sup> 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 operations for electrical workers and engineers working with high and low voltage switchgear in industrial facilities and networks.

#### **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 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.



























### **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\$ 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 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. Steve Mark, PE, MSc, BSc, is a Senior Electrical & Telecommunications Engineer with over 20 years of extensive experience within the Oil & Gas, Petrochemical and Power industries specializing in HV/LV Equipment, High Voltage Electrical Safety, LV & HV Electrical System, HV Equipments Inspection & Maintenance, HV Switchgear Operation & Maintenance, LV Distribution Switchgear & Equipment, Basic Electricity, Electrical & Special Hazards, Personnel Protection, Motor Controllers, Electrical Switching Practices, Emergency Planning, Safety Management, Earthing & Bonding Installation, Energized & De-Energized Work,

Protection Relays, Testing & Commissioning, Lock & Tag Out, Circuit Breakers & Switchgears, Portable Cables, Transformers, Surge Arrestors, Isolators & Fuses, Capacitor Banks, Earth & Shunt Reactors, Gas Insulated Substations (GIS), HV Substation Inspection & Reporting, HV Cable Design, HV Electrical System Commissioning, HV Equipments Inspection & Maintenance, UPS & Generators, Electrical Installations Design & Construction, Electrical Mechanical Installations, GIS Substations, GE Turbine Power Plant and Steam Power Plants. Further, he is also well-versed in Network & System Administration, Data/Voice Networking, Network VPN Capacity Calculations. Connection Implementation, Structured Cabling Constructions, Engineering Design, Security Installations Design & Implementation, Logistics Management, IT Analysis, Business Continuity Plan Design, Disaster Recovery Simulations, Supply Chain System Design, Barcode Marking & RFID Applications. He is currently the Lead Electrical Engineer of Public Power Corporation S.A wherein he is responsible for site manufacturing supervision of works and electrical maintenance support for the existing Steam Electrical Power Plant.

During his career life, Mr. Mark has gained his expertise and thorough practical experience through handling challenging positions such as being the IT & Telecommunications Manager, IT & Organization Manager, Logistics Manager, Electrical Engineer, Safety Engineer, Public Works Contractor, IT Support Analyst, Project Supervisor, Systems & Network Administrator, Data Protection Officer, Shop Auditor and Amateur Radio Operator for various multi-national companies and institutes.

Mr. Mark is a Registered Professional Engineer and holds a Master's degree in Quality Management & Technology from the Hellenic Open University as well as a Bachelor's degree in Electrical Engineering from the Technical University of Halkida, Euboea, Greece. Further, he is a Certified Instructor/Trainer, a Certified Safety Engineer and a Certified Data Protection Officer (DPO). Moreover, he is a member of Scientific Society of Technological Education of Engineers (EETEM) and has delivered numerous trainings, courses, seminars, workshops and conferences internationally.

#### Accommodation

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













## **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: Sunday, 05th of October 2025

Day I.	Sullday, 05 Of October 2025
0730 - 0800	Registration & Coffee
0800 - 0815	Welcome & Introduction
0815 - 0830	PRE-TEST
0830 - 0900	Legislation & Standards
0900 - 0915	Risk Management & Control
0915 - 0930	Approach to High Voltage - Safe Systems of Work, Permit Types &
	Permit Procedures
0930 - 0945	Break
0945 - 1030	Operate Local HV Switchgear
1030 - 1100	Operate Local LV Switchgear
1100 - 1230	Develop HV Switchgear Program
1230 - 1245	Break
1245 - 1330	Control Permit to Work Operations
1330 - 1420	Perform Switching to a Switching Program
1420 - 1430	Recap
1430	Lunch & End of Day One

Day 2: Monday, 06<sup>th</sup> of October 2025

Duy L.	monday, ou or october 2020
0730 - 0815	Coordinate & Direct Switching Program
0815 - 0845	Working Safely near Live Electrical Apparatus
0845 - 0930	Apply Access Procedures to Work on or Near Electrical Network
	Infrastructure
0930 - 0945	Break
0945 - 1015	Perform HV Field Switching Operation to a Given Schedule
1015 - 1145	Perform Power System Substation Switching Operation to a Given
	Schedule
1145 - 1230	Develop High Voltage Switching Schedule
1230 - 1245	Break
1245 - 1315	Coordinate Power Systems Permit Procedures
1315 - 1345	Coordinate & Direct Power System Switching Schedules
1345 - 1420	Solve Problems in Energy Supply Network Equipment
1420 - 1430	Recap
1430	Lunch & End of Day Two

Day 3: Tuesday, 07th of October 2025

Day o.	1 4 5 5 4 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
0730 - 0930	Practical Sessions Switching Programs
0930 - 0945	Break
0945 - 1100	Practical Sessions (cont'd) Isolation Certificates
1100 – 1230	Practical Sessions (cont'd) Isolation Certificates (cont'd)
1230 - 1245	Break
1245 - 1420	Practical Sessions (cont'd) Electrical Permit to Work
1420 - 1430	Recap
1430	Lunch & End of Day Three















Day 4: Wednesday, 08th of October 2025

0730 - 0930	Practical Sessions (cont'd)
	Danger Notices & Pre-Cautions
0930 - 0945	Break
0945 – 1100	Practical Sessions (cont'd)
	Sanction for Test
1100 – 1230	Practical Sessions (cont'd)
	Sanction for Test (cont'd)
1230 - 1245	Break
1245 – 1420	Practical Sessions (cont'd)
	Log-Out & Tag-Out
1420 - 1430	Recap
1430	Lunch & End of Day Four

Day 5: Thursday, 09th of October 2025

Day 5:	Thursday, 09" of October 2025
0730 - 0930	Practical Sessions (cont'd)
	Safe Key Systems
0930 - 0945	Break
0945 - 1100	Practical Sessions (cont'd)
	Electrical Safety Systems- Interlocks-Earthing-Isolation & Access Control
1100 – 1200	Practical Sessions (cont'd)
	Electrical Safety Systems- Interlocks-Earthing-Isolation & Access Control
	(cont'd)
1200 - 1215	Break
1215 1245	Practical Sessions (cont'd)
1215 – 1245	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







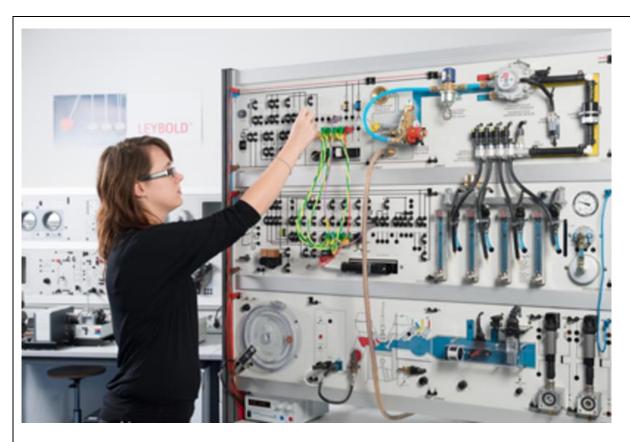






### **Practical Sessions**

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**

Mari Nakintu, Tel: +971 2 30 91 714, Email: mari1@haward.org













