

COURSE OVERVIEW EE0852 Electrical & Instrumentation Inspection (Certification)

Course Title

Electrical & Instrumentation Inspection (Certification)

Course Date/Venue

September 01-05, 2024/Boardroom 1, Elite Byblos Hotel Al Barsha, Sheikh Zayed Road, Dubai, UAE

30 PDHs)

Course Reference

EE0852

Course Duration/Credits

Five days/3.0 CEUs/30PDHs

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 delegates with an up-to-date overview of certified electrical and instrumentation inspector. covers the comprehensive knowledge, general requirements inspections, electrical and instrument document, material selection, installation and safety checklist for electrical inspections; the general wiring methods and identify boxes and conduit boxes, cabinets and cutout boxes. switches receptacles, services, feeders and branch circuits; and the grounding and bonding and identify the general electrical inspection checklists.



During this interactive course, participants will learn the commercial and industrial inspections for motors, transformers, capacitors, signs and outline the hazardous locations checklist. lighting; instrument controller, piping and instrument diagram; the fire and gas detection and ESD shutdown) (emergency procedures telecommunication: and the Calibration and function test instrument and identify hazardous location as well as basic and regulation inspection.

















Course Objectives

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

- Get certified as a "Certified Electrical and Instrumentation Inspector"
- Apply and gain a comprehensive knowledge on electrical and instrumentation inspection
- Recognize the general requirements inspections, electrical and instrument document, material selection, installation and safety checklist for electrical inspections
- Explain the general wiring methods and identify boxes and conduit boxes, cabinets and cutout boxes, switches and receptacles, services, feeders and branch circuits
- Describe grounding and bonding and identify the general electrical inspection checklists
- Carryout commercial and industrial inspections for motors, transformers, capacitors, signs and outline lighting
- Illustrate hazardous locations checklist, instrument controller, piping and instrument diagram
- Employ fire and gas detection and ESD (emergency shutdown) procedures and telecommunication
- Calibrate and function test instrument and identify hazardous location as well as basic and regulation inspection

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, sample video clips of the instructor's actual lectures & practical sessions during the course conveniently saved in a **Tablet PC**.

Who Should Attend

This course provides an overview of all significant aspects and considerations of electrical and instrumentation inspection of instruments and electrical measuring equipment for those who are involved in the field of electrical and instrumentation inspection including inspection engineers, electrical engineers, electrical inspection engineers and instrumentation engineers. Further, this course is also beneficial to those engineers who are vital participants in industrial settings and those who are familiar with electrical devices, their function and the standards of operation set by the engineering industry.

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

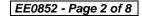
In an unlikely event, the course instructor may modify the above training methodology before or during the course for technical reasons.



















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. 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: -





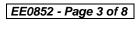




















(2) Official Transcript of Records will be provided to the successful delegates with the equivalent number of ANSI/IACET accredited Continuing Education Units (CEUs) earned during the course.



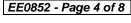






















Certificate Accreditations

Certificates are accredited by the following international accreditation organizations: -

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.



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.

Accommodation

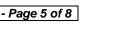
Accommodation is not included in the course fees. However, any accommodation required can be arranged at the time of booking



















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 40 years of extensive experient in Power & Water Utilities and Other Energy Sectors. His experienced Electrical Safety, Power System Equipment, Electrical Drawing, Transmission Networks, Substation, Cable & Over He Line, Substation Automation Systems & Application, Distribut Networks, Circuit Breaker, HV Switchgear Maintenance, HV

Electrical Authorisation, Basic Electricity, Electrical & Special Hazards, Person Protection, HV/LV Equipment, Motor Controllers, Electrical Switching Practic Uninterruptible Power Supply (UPS), UPS and Battery System, Prevention Maintenance of Battery Charger and UPS System, UPS, DC System & Battery Design, Operation, Maintenance & Troubleshooting, Emergency Planning, Saf Management, Safety Instrumented Systems (SIS), Safety Integrity Level (S Emergency Shutdown (ESD); Electrical Installation, Maintenance & Troubleshooti Electrical Inspection & Testing, Electrical Measurements, Power Flow Analysis Electrical Power Systems, Electrical Fundamentals, Basic Electricity & Electrical Codes, DCS, SCADA & PLC; Measurement (Flow, Temperature, Pressu **Analyzers** & Analytical Instrumentation: Process Instrumentation & Safeguarding; Process Controller, Control Loop & Va Tuning: Industrial Distribution Systems: Industrial Control & Control System Power Systems Protection & Relaying; Earthing, Bonding, Grounding, Lightning Surge Protection; Electric Power Substation & Systems; Electrical Engineer Principles: Motor Control Circuit: Electrical Fault Analysis: Electrical Networks Distribution Cables; Circuit Breakers, Switchgears, Transformers, Hazardo Areas Classification and Detailed Engineering Drawings, Codes & Standar Furthermore, he is also well-versed in Microprocessors Structure, Lead Auditor (I 9000:2000), ISO 9002, Quality Assurance, and Projects & Contracts Management.

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

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

















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 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:

Sunday, 01st of Sunday 2024 Day 1.

Sunday, or or Sunday 2024
Registration & Coffee
Welcome & Introduction
PRE-TEST
General Requirements Inspections
Break
Electrical & Instrument Document
Material Selection
Break
Installation
Safety Checklist for Electrical Inspections
Recap
Lunch & End of Day One

Monday, 02nd of Sunday 2024 Dav 2:

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0730 - 0900	General Wiring Methods
0900 - 0915	Break
0915 - 1100	Boxes & Conduit Bodies
1100 - 1230	Cabinets & Cutout Boxes
1230 - 1245	Break
1245 - 1420	Switches & Receptacles
1420 – 1430	Recap
1430	Lunch & End of Day Two

Tuesday, 03rd of Sunday 2024 Dav 3:

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0730 - 0930	Services, Feeders & Branch Circuits
0930 - 0945	Break
0945 - 1100	Grounding & Bonding
1100 – 1215	General Electrical Inspection Checklists
1215 - 1230	Break
1230 – 1420	Commercial & Industrial Inspections
	Motors • Transformers • Capacitors • Signs and Outline Lighting
1420 – 1430	Recap
1430	Lunch & End of Day Three

Wednesday, 04th of Sunday 2024 Day 4:

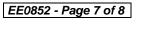
0730 - 0930	<i>Hazardous Locations Checklist</i> Checklist of Class I Locations ● Checklist of Class II Locations ● Checklist of Class III Locations
0930 - 0945	Break



















0945 - 1100	Instrument Controller
1100 - 1215	Piping & Instrument Diagram
1215 - 1230	Break
1230 - 1420	Fire & Gas Detection & ESD (Emergency Shutdown)
1420 - 1430	Recap
1430	Lunch & End of Day Four

Dav 5: Thursday, 05th of Sunday 2024

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Telecommunication
Break
Calibrate & Function Test Instrument
Hazardous Location
Break
Basic & Regulation Inspection
Course Conclusion
COMPETENCY EXAM
Presentation of Course Certificates
Lunch & End of Course

Practical Sessions

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



Course Coordinator

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









