

## COURSE OVERVIEW FE0630-3D

### Material Certification and Inspection Levels

#### Course Title

Material Certification and Inspection Levels

#### Course Date/Venue

Please see page 2

#### Course Reference

FE0630-3D

#### Course Duration/Credits

Three days/1.8 CEUs/18 PDHs

#### 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 Material Certification Management. It covers the physical, chemical and mechanical properties of different types of materials; the ferrous and non-ferrous metals, plastics and composite materials; the material processing, heat treatment, material selection, metallurgy, material defects and material corrosion mechanisms; the material requisition as per standard requirements and material management cycle; inspecting materials in accordance with the international codes and standards; the acceptance/rejection criteria during the inspection process; the material certificates availability as per purchase order for materials received; and completing "Certificates Receipt Reports" as per verification results ensuring that items with serial numbers, heat numbers, and traceability are arranged.

During this interactive course, participants will learn the materials certification documents are properly scanned along with required information, entered into warehouse "Material Certificates Database" by provision of spot checks; communicating with user departments on resolving material inspection and certification issues; completing "Certificates Issue Reports" as per user department requests for materials; completing "Transfer to Disposal" forms for user consideration; and ensuring that all rejected materials are segregated and kept in quarantine or disposal area in conjunction with Warehouse Supervisor.

### Course Objectives

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

- Apply systematic techniques in material certification management
- Identify the physical, chemical and mechanical properties of different types of materials including metals (ferrous and non-ferrous), plastics and composite materials
- Carryout material processing, heat treatment, material selection, metallurgy, material defects and material corrosion mechanisms
- Prepare material requisition as per standard requirements and discuss the material management cycle
- Inspect materials in accordance with the international codes & standards and distinguish the acceptance/rejection criteria during the inspection process
- Verify material certificates availability as per purchase order for materials received and complete "Certificates Receipt Reports" as per verification results ensuring that items with serial numbers, heat numbers, and traceability are arranged
- Ensure that the materials certification documents are properly scanned and, along with required information, entered into warehouse "Material Certificates Database" by provision of spot checks
- Communicate with user departments on resolving material inspection and certification issues and complete "Certificates Issue Reports" as per user department requests for materials
- Complete "Transfer to Disposal" forms for user consideration and ensure that all rejected materials are segregated and kept in quarantine or disposal area in conjunction with Warehouse Supervisor

### Exclusive Smart Training Kit - H-STK®



Participants of this course will receive the exclusive "Howard 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 material certification management for senior certificate management engineers, certificate management engineers, certificate management technicians, inspection engineers and material control engineers, management and other technical staff.

### Course Date/Venue

| Session(s) | Date                 | Venue                                                                    |
|------------|----------------------|--------------------------------------------------------------------------|
| 1          | June 16-18, 2025     | Glasshouse Meeting Room, Grand Millennium Al Wahda Hotel, Abu Dhabi, UAE |
| 2          | August 03-05, 2025   | Tamra Meeting Room, Al Bandar Rotana Creek, Dubai, UAE                   |
| 3          | October 06-08, 2025  | Glasshouse Meeting Room, Grand Millennium Al Wahda Hotel, Abu Dhabi, UAE |
| 4          | December 07-09, 2025 | Tamra Meeting Room, Al Bandar Rotana Creek, Dubai, UAE                   |



### 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



**Haward Technology Middle East**  
Continuing Professional Development (HTME-CPD)

**CEUs**  
Page 1 of 1

### CEU Official Transcript of Records

**TOR Issuance Date:**

**14-Nov-21**

**HTME No.**

**8667-2014-9020-2555**

**Participant Name:**

**Abdulsatar Al Otaibi**

| Program Ref. | Program Title                     | Program Date         | No. of Contact Hours | CEU's |
|--------------|-----------------------------------|----------------------|----------------------|-------|
| FE0630       | Material Certification Management | November 10-14, 2021 | 30                   | 3.0   |

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

**3.0**

**TRUE COPY**



**Maricel De Guzman**  
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**

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.

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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 **1.8 CEUs** (Continuing Education Units) or **18 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\$ 3,750** 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. George Poulos**, MBA, MSc, BSc, CEng, is a **Senior Corrosion & Metallurgical Engineer** with over **45 years** of extensive experience within the **Oil & Gas, Petrochemical, Refinery, Construction, Aircraft & Shipbuilding** Industry. His wide experiences cover in the areas of **Corrosion in Urea & Ammonia Plants**, Corrosion and **Metallurgy**, Analysis & Prevention, **Corrosion** Fabrication & Inspection, **Fabrication & Repair**, **Corrosion** Prevention, **Corrosion** Engineering, **Corrosion** Control, **Corrosion** Inhibition, **Corrosion**

Management in Process Operations, **Corrosion** & Prevention of Failures, **Pressure Vessels**, **Piping Inspection**, **Risk-Based Inspection**, **Fitness-for-Service (FFS)**, **Metallurgical Failure**, **Metallurgy & Metallurgical Processes**, **Metallurgical Lab**, **Material Selection**, **Cathodic Protection** Systems, **Steel Metallurgy**, **Steel Structure Welding**, **Steelmaking Slag**, **Steel Making Application**, **Steel Making Process**, **Steel Manufacturing**, **Steel Forging**, **Steel Manufacturing & Process Troubleshooting**, **Hot Rolling Process**, **Hot Strip Mill**, **Mill Operations**, **Roll Mill**, **Electric Arc Furnace (EAF)**, **Slit Rolling**, **Carbon Steel Pipe Wall Thickness & Grade Selection**, **Ferro-Alloys**, **Heat Treatment & Prevention Techniques** and **Post Weld Heat Treatment**. Further, he is also well-versed in **Welding** Inspection, **Welding & Machine** Techniques, **TIG & Arc Welding**, **Shielded Metal Arc Welding**, **Gas Tungsten & Gas Metal Arc Welding**, **Welding** Procedure Specifications & Qualifications, **Aluminium Welding**, **Hot Work-Safety**, **SMAW**, **GTAW**, **Welding** Techniques, **Pipeline Welding** Practices, **Welding** Engineering, **Welding** Fatigue & Fracture Mechanics, **Welding** Inspection Technology, **Welding** Safety, **Welding** Defects Analysis, **Welding** Technology, **Welding** Problems, **Welding & Non Destructive** Testing and **Metallurgy** Techniques.

During his career life, Mr. Poulos has gained his practical and field experience through his various significant positions and dedication as the **Chief Executive**, **Head of Technical Studies**, **Manager**, **Senior Consultant**, **Lead Welding Engineer**, **Senior Welding Engineer**, **Design Engineer**, **Sales Engineer**, **Author**, **Welding** Instructor, **Visiting Lecturer** and **Technical Proposal Research Evaluator** from various international companies such as Greek Welding Institute, Hellenic Quality Forum and International Construction Companies such as Shipbuilding, Aircraft Industry and Oil and Gas Industry.

Mr. Poulos is a **Registered Chartered Engineer** and has a **Master's** degree in **Naval Architecture**, a **Bachelor's** degree in **Welding Engineering** and a Master of Business Administration (**MBA**) from the **Sunderland University**, **Aston University** and **Open University**, **UK**, respectively. Further, he is a **Certified Trainer/Instructor**, an active Member of Chartered Quality Institute (**CQI**), The British Welding Institute (**TWI**), The Royal Institution of Naval Architects (**RINA**) and American Welding Society (**AWS**), a Registered **EWFIW** (European Welding Federation-International Welding Institute W/E) and an **IRCA** Accredited External Quality Systems Auditor through BVQI. He is an **Author** of Technical Book dealing with Protection/Health/Safety in the Welding/Cutting domain and delivered various trainings, seminars, conferences, workshops and courses globally.

### 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.

### 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**

|             |                                                 |
|-------------|-------------------------------------------------|
| 0730 - 0800 | Registration & Coffee                           |
| 0800 - 0815 | Welcome & Introduction                          |
| 0815 - 0830 | <b>PRE-TEST</b>                                 |
| 0830 - 0900 | <b>Physical Properties of Material</b>          |
| 0900 - 0930 | <b>Chemical Properties of Materials</b>         |
| 0930 - 0945 | Break                                           |
| 0945 - 1030 | <b>Mechanical Properties of Material</b>        |
| 1030 - 1100 | <b>Material Classification</b>                  |
| 1100 - 1130 | <b>Ferrous Metal</b>                            |
| 1130 - 1200 | <b>Non-Ferrous Metals</b>                       |
| 1200 - 1230 | <b>Plastic &amp; Composite Material</b>         |
| 1230 - 1245 | Break                                           |
| 1245 - 1315 | <b>Material Processing &amp; Heat Treatment</b> |
| 1315 - 1420 | <b>Material Selection</b>                       |
| 1420 - 1430 | <b>Recap</b>                                    |
| 1430        | Lunch & End of Day One                          |

#### **Day 2**

|             |                                                                            |
|-------------|----------------------------------------------------------------------------|
| 0730 - 0815 | <b>Metallurgy Overview</b>                                                 |
| 0815 - 0900 | <b>Material Inherent Defects</b>                                           |
| 0900 - 0930 | <b>Material Defects During Fabrication</b>                                 |
| 0930 - 0945 | Break                                                                      |
| 0945 - 1015 | <b>Material Defects Due to Service</b>                                     |
| 1015 - 1100 | <b>Corrosion Mechanism</b>                                                 |
| 1100 - 1130 | <b>Making Material Requisition as per Standard &amp; Code Requirements</b> |

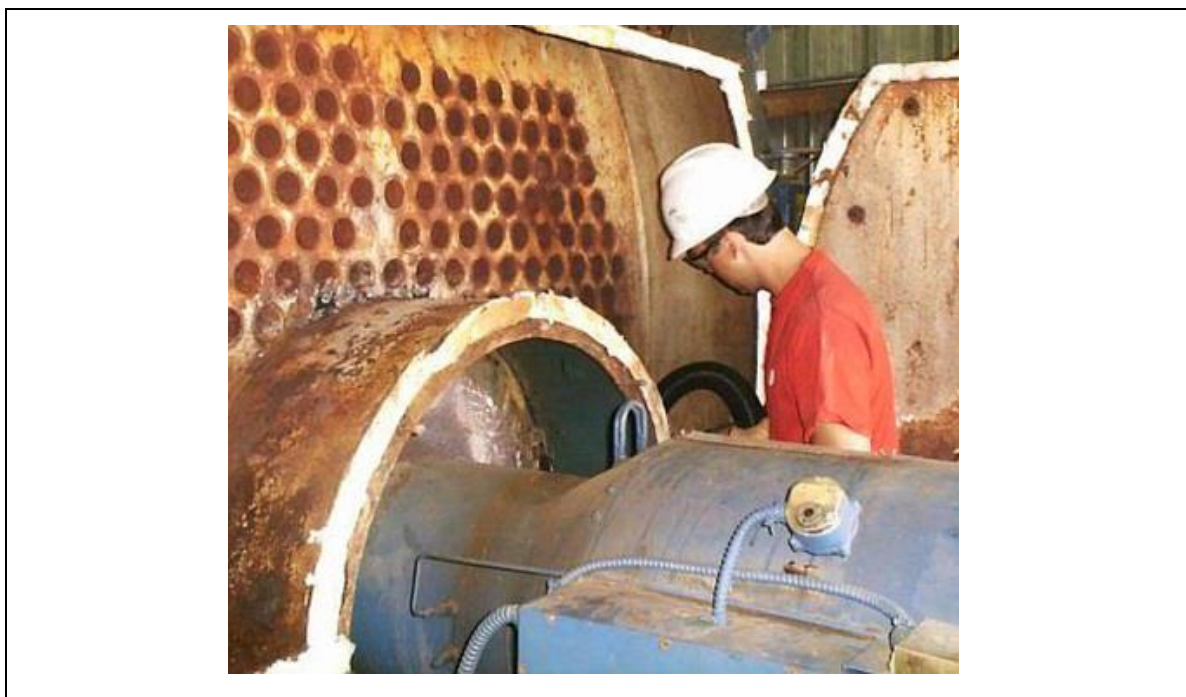
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|-------------|-----------------------------------------------------------|
| 1130 – 1200 | <i>Material Management Cycle</i>                          |
| 1200 -1230  | <i>Material Inspection as per Codes &amp; Standards</i>   |
| 1230 - 1245 | <i>Break</i>                                              |
| 1245 – 1315 | <i>Acceptance/Rejection Criteria as per Material Code</i> |
| 1315 - 1420 | <i>Material Test Certificate Review</i>                   |
| 1420 - 1430 | <i>Recap</i>                                              |
| 1430        | <i>Lunch &amp; End of Day Two</i>                         |

### **Day 3**

|             |                                                                 |
|-------------|-----------------------------------------------------------------|
| 0730 – 0815 | <i>Material Loading</i>                                         |
| 0815 - 0900 | <i>Material Receiving Report</i>                                |
| 0900 – 0930 | <i>Material Certificate Verification</i>                        |
| 0930 –0945  | <i>Break</i>                                                    |
| 0945 – 1015 | <i>Certificate Receipt Report</i>                               |
| 1015 – 1045 | <i>Material Certificates Database</i>                           |
| 1045 - 1115 | <i>Resolving Material Inspection &amp; Certification Issues</i> |
| 1115 – 1145 | <i>Certificate Issue Report</i>                                 |
| 1145 – 1215 | <i>Transfer to Disposal Forms</i>                               |
| 1215 - 1230 | <i>Break</i>                                                    |
| 1230 - 1300 | <i>Material Rejection &amp; Segregation Procedures</i>          |
| 1300 - 1315 | <i>Course Conclusion</i>                                        |
| 1315 - 1415 | <b>COMPETENCY EXAM</b>                                          |
| 1415 - 1430 | <i>Presentation of Course Certificates</i>                      |
| 1430        | <i>Lunch &amp; End of Course</i>                                |

### **Practical Sessions**

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



### **Course Coordinator**

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