

# **COURSE OVERVIEW HE0180 Environmental Management & Technology (EMT)**

Environmental Engineering, Management, Impact Assessment & Sustainable Reporting

#### **Course Title**

Environmental Management & Technology Engineering. Environmental Management. **Impact** Assessment Sustainable Reporting

### **Course Date/Venue**

August 24-28, 2025/Meeting Plus 1, City Centre Rotana Doha, Doha, Qatar

## Course Reference

HE0180

## **Course Duration/Credits**

Five days/3.0 CEUs/30 PDHs

## **Course Description**









The environmental best practices course combines technical environmental engineering fundamentals with management-based subjects more such environmental management, regulation, law, economics, impact assessment and sustainable development and reporting.

This course will cover the environmental monitoring, dispersion modelling and dispersion tools for clean design and operation of industry. It will examine how businesses integrate environmental issues into their activities, with an introduction to the key elements of EMAS, ISO14001 and tools such as Life Cycle Assessment.

Through practical sessions, the course will encourage the development of skills in conducting reviews and audits, as well as considering the organizational structures and cultures that affect implementation. The course will cover pollution measurement and analysis which will give participants the opportunity through practical exercises to develop skills in survey design and implementation to critically evaluate survey data in terms of variability, sources of error and bias, and to develop skills in environmental reporting and presentation.













Sustainability reporting, also called triple-bottom-line business accountability is the practice of expanding traditional business reporting to take into account environmental and social performance in addition to financial results. Participants will be trained how to prepare comprehensive and factual sustainability reports.

#### **Course Objectives**

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

- Apply and gain an in-depth knowledge on environmental management & technology (EMT) including scope, features and benefit in the industry
- Identify the various environmental issues encountered in the industry and recognize the response of the society regarding these environmental issues
- Discuss and employ environmental management systems and the ISO 14001 policy to achieve continuous improvement in environmental performance
- Plan and implement legal requirements as well as the four implementation stages and techniques to achieve the objectives, targets and commitments in the EMS
- Apply the technologies and systematic techniques for preventing contamination & pollution as well as handling hazardous waste materials
- Use material safety data sheet to detect and measure the incidence of contamination and apply contingency planning as well as preventive procedures
- Discuss the different types of portable monitoring equipment such as air PID, LEL Detector, single gas detector, etc.
- Discuss the sustainable development of the industry and prepare comprehensive and factual sustainability reports

## **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 environmental management and technology for managers, engineers, supervisors, officers, researchers, coordinators and specialists.

#### **Accommodation**

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









## **Course Certificate(s)**

(1) Internationally recognized Competency Certificates and 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

#### Recertification is FOC for a Lifetime.

### Sample of Certificates

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







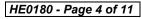
HE0180 - Page 3 of 11



(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.

• ACCREDITED
PROVIDER

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.





#### **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:



Dr. John Petrus, PhD, MSc, BSc, is a Senior HSE Consultant with over 30 years of onshore & offshore experience within the Oil & Gas, Refinery and Petroleum industries. His wide experience covers in the areas of HAZOP & HAZID, HAZMAT & HAZCOM Storage & Disposal, As Low as Reasonably Practicable (ALARP), Process Hazard Analysis (PHA), Process Safety Management (PSM), Hazardous Materials & Chemicals Handling, Pollution Control, Environment, Environmental Management System, Environmental Impact Assessment (EIA), Environmental Monitoring & Modelling, Environmental Awareness in Industrial Plant, Environmental Pollution &

Control in Oil Industry, Environmental Enforcement & Compliance, Health & Safety Management, Process Risk Analysis, Effective Tool Box Talks, Construction Sites Safety, HSSE Management System, HSSE Audit & Inspection, HSEQ Procedures, Authorized Gas Testing, Confined Space Entry & Rescue, Risk Management, Quantitative & Qualitative Risk Assessment, Working at Height, Firefighting Techniques, Fire & Gas Detection System, Fire Fighter & Fire Rescue, Fire Risk Assessment, HSE Industrial Practices, Manual Handling, Rigging Safety Rules, Machinery & Hydraulic Lifting Equipment, Warehouse Incidents & Accidents Reporting, Incident & Accident Investigation, Emergency Planning, Emergency Response & Crisis Management Operations, Waste Management Monitoring, Incident Command, Job Safety Analysis (JSA), Behavioral Based Safety (BBS). Further he is also well versed in Materials for Construction & Repair of Concrete, Concrete Structures & Building Rehabilitation, Reinforced Concrete Structures Protection, Building Construction Technology, Construction Operations & Civil Engineering Services, Building Management, Building Maintenance, Construction & Concrete Works, Construction Management, Construction Materials & Testing, Construction Safety, Predictive Maintenance in Construction, Construction & Facilities Development, Buildings & Diverse Plant Infrastructure, Planning & Monitoring the Progress & Quality of Work, Physical Planning & Operations, Rotating Machinery Principles & Applications, Rotating Equipment Selection, Operation, Maintenance, Inspection & Troubleshooting, Rotating Machine/Equipment in Industry, Control Valves & Actuators, Data Analytics for Managerial Decision Making, Business Process Analysis, Mapping & Modeling, Research Methods & Analysis, Statistical Data Needs Analysis, Oil & Gas Industry Business Environment & Competitive Intelligence Gathering & Analysis, Petroleum Economics & Risk Analysis, Certified Data Analysis.

During his career life, Dr. Petrus held significant positions and dedication as the Executive Director, Senior Geoscience Advisor, Exploration Manager, Project Manager, Manager, HSE Engineer, Mechanical Engineer, Maintenance Engineer, Chief Geologist, Chief of Exploration, Chief of Geoscience, Senior Geosciences Engineer, Senior Explorationist, Senior Geologist, Geologist, Senior Geoscientist, Geomodeller, Geoscientist, CPR Editor, Resources Auditor, Project Leader, Technical Leader, Safety Supervisor, Team Leader, Senior HSE Consultant, Scientific Researcher and Senior Instructor/Trainer from various international companies and universities such as the Dragon Oil Holding Plc., ENOC, MENA, ENI Group of Companies, Ocre Geoscience Services (OGS), Burren RPL, Ministry of Oil-Iraq, Eni Corporate University, Standford University, European Universities, European Research Institutes, NorskHydro Oil Company, Oil E&P Companies, just to name a few.

Dr. Petrus has a **PhD** in **Geology** and **Tectonophysics** and **Master** and **Bachelor** degrees in **Earth Sciences** from the **Utrecht University**, **The Netherlands**. Further, he is a **Certified Instructor/Trainer**, a **Certified Trainer/Assessor/Internal Verifier** by the **Institute of Leadership & Management (ILM)**, a Secretary and Treasurer of Board of Directors of Multicultural Centre, Association Steunfonds SSH/SSR and Founding Member of Sfera Association. He has further published several scientific publications, journals, research papers and books and delivered numerous trainings, workshops, courses, seminars and conferences internationally.









#### 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 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, 24th of August 2025

Day 1.	Sunday, 24 Of August 2020
0730 - 0800	Registration & Coffee
0800 - 0815	Welcome & Introduction
0815 - 0830	PRE-TEST
0830 - 0930	Introduction to Environmental Management Systems & ISO 14000 Series
	Developing a Framework for Managing Environmental Impact
0930 - 0945	Break
	Environmental Policy
0945 - 1100	Appropriate to Organization and Complies with Environmental Regulations •
	Compliance with Legal Requirements and Voluntary Commitments • Global &
	Local Environmental Issues • Pollution Prevention • Continuous
	Improvement in Environmental Performance
	Environmental Policy (cont'd)
1100 - 1230	BS EN ISO 14001: 1996/The Eco-Management and Audit Scheme (EMAS) •
	Developing an Environmental Policy for your Company
1230 - 1245	Break
	Planning
1245 - 1420	Environmental Aspects & Impacts • Source of Pollution in Oil and Gas Process
	• Environmental Aspects and Legal Requirements • Objectives & Targets •
	Legal & Other Requirements • Active, Documented Programs to Achieve the
	Objectives, Targets, and Commitments in the EMS, including the Means and
	Time Frames for their Completion • Control/Pollution Prevention on emission to
	Atmosphere, Waste, Water Environment, Land Contamination
1420 – 1430	Recap
	Using this Course Overview, the Instructor(s) will Brief Participants about the
	Topics that were Discussed Today and Advise Them of the Topics to be Discussed
	Tomorrow
1430	Lunch & End of Day One













Day 2: Monday, 25<sup>th</sup> of August 2025

,	monady, 20 017 tagaot 2020
	Implementation & Operation
0730 – 0900	Structure & Responsibility • Achieving and Maintaining Compliance and
	Meeting Performance Objectives • Communicating Relevant Information
	Regarding the EMS, including the Facility's Environmental Performance,
	throughout the Organization • Providing Appropriate Incentives for Personnel
	to Meet the EMS Requirements • Document Control
0900 - 0915	Break
	Implementation & Operation (cont'd)
	Environmental Training Programs • Document & Operational Control of
0015 1100	Environmental Management System • Documentation of the Key EMS
0915 – 1100	Elements • Operation and Maintenance Programs for Equipment and for
	Other Operations that are Related to Legal Compliance and Other Significant
	Environmental Aspects • An Emergency Preparedness & Response Program
	Checking & Corrective Action
1100 1220	Non-Conformance, Corrective & Preventive Actions • Monitoring &
1100 – 1230	Measurement • Guidance on Developing Environmental KPI • Greenhouse
	Gas Inventory Guidance and Interpretation
1230 - 1245	Break
1245 - 1420	Management Review
1420 – 1430	Recap
	Using this Course Overview, the Instructor(s) will Brief Participants about the
	Topics that were Discussed Today and Advise Them of the Topics to be
	Discussed Tomorrow
1430	Lunch & End of Day Two

Day 3: Tuesday, 26th of August 2025

ruesuay, 20 Or August 2025
Hazardous Waste Management & Pollution Control
Pollution Control Theory • Cleaner Technologies • Pollution Control
Techniques
Break
Toxicology
Basic Toxicology • Case Studies in Environmental Health • Dose - Response
Risk
Material Safety Data Sheets (MSDS )
MSDS Overview • Reading and Using MSDS
Break
Material Safety Data Sheets (MSDS) (cont'd)
Handling Storage • Hazardous Ingredients
Recap
Using this Course Overview, the Instructor(s) will Brief Participants about the
Topics that were Discussed Today and Advise Them of the Topics to be
Discussed Tomorrow
Lunch & End of Day Three

Day 4: Wednesday, 27th of August 2025

, ,	
0730 - 0900	Material Safety Data Sheets (MSDS) Regulatory Levels
	Health Based Exposure Levels • Fire and Explosion Labeling
0900 - 0915	Break
0915 - 1100	Pollution/Contamination Prevention Procedures
	Pollution Reduction Zones













1100 – 1230	Pollution/Contamination Prevention Procedures (cont'd)
	Decontamination & Emergency Procedures
1230 - 1245	Break
1245 – 1420	Contingency Planning
	Dealing with Spillage • Dealing with Release of Hazardous Substances into
	the Atmosphere
1420 – 1430	Recap
	Using this Course Overview, the Instructor(s) will Brief Participants about the
	Topics that were Discussed Today and Advise Them of the Topics to be
	Discussed Tomorrow
1430	Lunch & End of Day Four

Dav 5: Thursday, 28th of August 2025

Day J.	Thursday, 20 Or August 2023
0730 - 0900	Portable Monitoring Equipment
	Air Displacement Theory ● Types of Equipment ● PID – How it Works
0900 - 0915	Break
0915 – 1100	Portable Monitoring Equipment (cont'd)
	PID -What it Detects ● As a Hazmat Tool ● Limitation
1100 – 1200	Portable Monitoring Equipment (cont'd)
	LEL Detectors • Single Gas Detectors • Colormetric Sampling Tubes
1200 – 1215	Break
1215 - 1300	Case Studies & Practical Exercises
1300 – 1315	Course Conclusion
	Using this Course Overview, the Instructor(s) will Brief Participants about the
	Course Topics that were Covered During the Course
1315 – 1415	COMPETENCY EXAM
1415 - 1430	Presentation of Course Certificates
1430	Lunch & End of Course











## **Simulators (Hands-on Practical Sessions)**

Practical sessions will be organized during the course for delegates to practice the theory learnt. Delegates will be provided with an opportunity to carryout various exercises using the Environmental simulators "CAMEO Chemicals Suite Software", "US EPA SCREEN3 Model" and "AERSCREEN Model".



## **CAMEO Chemicals Suite Software**



**US EPA SCREEN3 Model** 













# **AERSCREEN Model**

<u>Course Coordinator</u>
Reem Dergham, Tel: +974 4423 1327, Email: <u>reem@haward.org</u>

