

## **COURSE OVERVIEW HE0595**

### **Certified Fire Fighter Rescue Missions**

#### **Course Title**

Certified Fire Fighter Rescue Missions

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

November 23-27, 2025/Tamra Meeting Room,  
Al Bandar Rotana Creek, Dubai, UAE

#### **Course Reference**

HE0595

#### **Course Duration/Credits**

Five days/3.0 CEUs/30 PDHs



#### **Course Description**



***This practical and highly-interactive course includes practical sessions and demonstration where participants carryout fire fighting and rescue missions. Theory learnt in the class will be applied using a fire extinguisher and various firefighting equipment through practical sessions.***



This course is designed to provide delegates with a detailed and up-to-date overview of Certified Fire Fighter Rescue Missions. The course will help the participants to determine the concept of fire behavior including the sources of heat, oxygen and its effect on combustion, flammable and explosive limits, modes of heat transfer, unique fire events and classes of fire; discuss the overview of the process industry particularly the principles of exploration, production and enhanced oil recovery (EOR); and identify the physical properties of hydrocarbons as well as its vapor density and pressure, specific gravity and characteristics.



Participants will also be able to analyze the characteristics of hydrocarbon releases, fires and explosions and explain the concept of Boiling Liquid Expanding Vapor Explosions (BLEVE); apply rescue procedures including search of burning structures, victim removal, drags and carries and extrication from motor vehicles and become acquainted with the specialized rescue situations and tools; and discuss the principles of forcible entry including the tools and equipments used in the forcible entry and improve maintenance of forcible entry tools, etc.

### Course Objectives

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

- Apply systematic techniques in fire fighter rescue missions
- Determine the concept of fire behavior including the sources of heat, oxygen and its effect on combustion, flammable and explosive limits, modes of heat transfer, unique fire events and classes of fire
- Discuss the overview of the process industry particularly the principles of exploration, production and enhanced oil recovery (EOR)
- Identify the physical properties of hydrocarbons as well as its vapor density and pressure, specific gravity and characteristics
- Analyze the characteristics of hydrocarbon releases, fires and explosions and explain the concept of Boiling Liquid Expanding Vapor Explosions (BLEVE)
- Apply rescue procedures including search of burning structures, victim removal, drags and carries and extrication from motor vehicles and become acquainted with the specialized rescue situations and tools
- Discuss the principles of forcible entry including the tools and equipments used in the forcible entry and improve maintenance of forcible entry tools
- Review and improve rescue operations including rescuer climb, equipment lifting and positioning, casualty positioning on stretcher and descending and ascending
- Carryout the primary and secondary casualty rescue survey techniques and practice the paramedic service of casualty in hazardous high station, safe positioning and descending
- Use handling techniques of ropes as well as ascending and descending machines and practice confined space vertical and horizontal casualty extrication techniques at/from standard high levels
- Implement unison rescue techniques in utilizing crane boom basket and manual joined rescuer and casualty rope descending techniques
- Improve confined space team search and rescue techniques as well as structural internal rescue missions

### 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 fire fighting rescue missions for all firemen and HSE, operations, production, maintenance personnel and all other employees who are working in the process industry.



### Course Certificate(s)

- (1) Internationally recognized Competency Certificates and Plastic Wallet Card Certificates 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)

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**CEUs**

### CEU Official Transcript of Records

**TOR Issuance Date:**

**14-Sep-17**

**HTME No.**

**PAR10177**

**Participant Name:**

**Ali Al Hassan**

Program Ref.	Program Title	Program Date	No. of Contact Hours	CEU's
HE0595-3D-IH	Certified Fire Fighter Rescue Missions	September 12-14, 2017	19.5	1.95

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

**1.95**

**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), 1760 Old Meadow Road, Suite 500, McLean, VA 22102, 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**

Haward's certificates are accredited by the following international accreditation organizations:

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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.

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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 **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.

### **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. Raymond Tegman** is a **Senior HSE Consultant** with extensive experience within the **Oil & Gas, Petrochemical and Refinery** industries. His broad expertise widely covers in the areas of Process Safety Management (**PSM**), Process Hazard Analysis (**PHA**), Techniques, **HAZOP**, **HSE Risk**, **Pre-Start-up Safety Reviews**, **HSE Risk** Identification, Assessments & Audit, **HSE Risk** Assessment & Management Concepts, **HSE Management** Policy & Standards, **HSSE Emergency Response & Crisis Management** Operations, **Confined Space Entry**, **Quantitative Risk Assessment (QRA)**, Hazardous Materials & Chemicals Handling, Safety Precaution & Response Action Plan, **Hazard & Risk** Assessment, Task Risk Assessment (**TRA**), **Rigging** Safety Rules, Machinery & Hydraulic **Lifting Equipment**, **Radiation Safety & Protection**, **Radioactive Waste Management**, **Radiation Protection Instrumentation**, Handling **Hazardous Chemicals**, Spill Containment, **Fire** Protection, **Fire** Precautions, **Incidents & Accidents** Reporting, **HSEQ** Audits & Inspection, **HSEQ** Procedures, **Environmental** Awareness, **Waste** Management Monitoring, **Emergency Planning**, **Emergency** Management, **Working at Heights**, **Root Cause Analysis**, **HSE** Rules & Regulations, **Incident Command**, **Accident & Incident Investigation**, **Emergency Response Procedures**, Job Safety Analysis (**JSA**), Behavioural Based Safety (**BBS**), **Fall Protection**, **Work Permit & First Aid**, Lock-out/Tag-out (**LOTO**), **Emergency Response**, **Construction** Supervision, **Scaffolding** Inspection, **HAZCHEM**, Manual Material Handling, **Road Traffic** Supervision, ISO 9001 and OHSAS 18001.

During his career life, Mr. Tegman has gained his practical and field experience through his various significant positions and dedication as the **Operations Manager**, **Safety & Maintenance Manager**, **Safety Manager**, **Road/Traffic Supervisor**, **Assessor/Moderator**, **Safety Consultant**, **Safety Advisor**, **Safety Officer** and **Liaison Officer** from Zero Harm, SHRA Training & Services (Health & Safety), Road Crete, Balwin Property Development, DEME International, Gladstone Australia, Godavari Gas Pipeline and New Castle NCIG.

### 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 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:

#### Day 1: Sunday, 23<sup>rd</sup> of November 2025

0730 – 0800	Registration & Coffee
0800 – 0815	Welcome & Introduction
0815 – 0830	<b>PRE-TEST</b>
0830 – 0930	<b>Fire Behavior</b> Fire Triangle, Tetrahedron, and Pyramid • Measurements • Chemistry and Physics of Fire • Sources of Heat • Combustion
0930 – 0945	Break
0945 – 1100	<b>Fire Behavior (cont'd)</b> Oxygen and its Effect on Combustion • Vapor Pressure and Vapor Density • Boiling Point • Flammable and Explosive Limits • The Burning Process - Characteristics of Fire Behavior
1100 – 1230	<b>Fire Behavior (cont'd)</b> Modes of Heat Transfer • Thermal Conductivity of Materials • The Physical State of Fuels and Effect on Combustion • Theory of Fire Extinguishment • Unique Fire Events • Classes of Fire
1230 – 1245	Break
1245 – 1420	<b>Overview of the Process Industry</b> Exploration • Production • Enhanced Oil Recovery (EOR) • Secondary Recovery • Tertiary Recovery • Transportation • Refining • Petrochemical • Chemical
1420 – 1430	<b>Recap</b> 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, 24<sup>th</sup> of November 2025

0730 – 0930	<b>Physical Properties of Hydrocarbons</b> Characteristics of Hydrocarbons • Lower Explosive Limit (LEL)/Upper Explosive Limit (UEL) • Flash Point (FP) • Autoignition Temperature (AIT) • Vapor Density
0930 – 0945	Break
0945 – 1100	<b>Physical Properties of Hydrocarbons(cont'd)</b> Vapor Pressure • Specific Gravity • Flammable • Combustible • Heat of Combustion • Description of Some Common Hydrocarbons
1100 – 1230	<b>Characteristics of Hydrocarbon Releases, Fires &amp; Explosions</b> Hydrocarbon Releases • Gaseous Releases • Mists or Spray Releases • Liquid Releases • Nature and Chemistry of Hydrocarbon Combustion • Hydrocarbon Fires • Nature of Hydrocarbon Explosions • Semi-Confined Explosion Overpressures
1230 – 1245	Break



1245 – 1420	<b>Characteristics of Hydrocarbon Releases, Fires &amp; Explosions (cont'd)</b> Vapor Cloud Explosion Overpressures • Boiling Liquid Expanding Vapor Explosions (BLEVE) • Smoke and Combustion Gases • Mathematical Consequence Modeling • Methods of Flame Extinguishment • Selection of Fire Control and Suppression Methods • Terminology of Hydrocarbon Explosions and Fires
1420 – 1430	<b>Recap</b> 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, 25<sup>th</sup> of November 2025**

0730 – 0930	<b>Rescue Procedures</b> Hazards Associated with Rescue Operations • Search of Burning Structures • Victim Removal, Drags and Carries
0930 – 0945	Break
0945 – 1100	<b>Rescue Procedures (cont'd)</b> Extrication from Motor Vehicles • Specialized Rescue Situations and Tools
1100 – 1230	<b>Forcible Entry</b> Forcible Entry Tools • Safety with Forcible Entry Tools • Maintenance of Forcible Entry Tools • Construction and Forcible Entry
1230 – 1245	Break
1245 – 1420	<b>Forcible Entry (cont'd)</b> Methods of Forcible Entry • Windows • Breaching Walls and Floors • Tool Assignments
1420 – 1430	<b>Recap</b> 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 Three

**Day 4: Wednesday, 26<sup>th</sup> of November 2025**

0730 – 0930	<b>Rescue Operations</b> Identification of Rescue Device/Tools/Machinery within Classified Hazardous Locations • Rescuer Climb, Equipment Lifting & Positioning
0930 – 0945	Break
0945 – 1100	<b>Rescue Operations (cont'd)</b> Casualty Positioning on Stretcher, Descending & Ascending • Primary & Secondary Casualty Rescue Survey Techniques
1100 – 1230	<b>Rescue Operations (cont'd)</b> Paramedic Service of Casualty in Hazardous High Station, Safe Positioning & Descending • Handling Techniques of Ropes, Ascending/Descending Machines • Confined Space Vertical & Horizontal Casualty Extrication Techniques at/from Standard Height Levels
1230 – 1245	Break





1245 – 1420	<b>Rescue Operations (cont'd)</b> Practice of Unison Rescue Techniques in Utilizing Crane Boom Basket • Manual Jointed Rescuer & Casualty Rope Descending Techniques • Confined Space Team Search & Rescue Techniques as well as Structural Internal Rescue Missions
1420 – 1430	<b>Recap</b> 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

**Day 5: Thursday, 27<sup>th</sup> of November 2025**

0730 – 0930	<b>Practical Sessions</b>
0930 – 0945	Break
0945 – 1100	<b>Practical Sessions (cont'd)</b>
1100 – 1230	<b>Practical Sessions (cont'd)</b>
1230 – 1245	Break
1245 – 1300	<b>Practical Sessions (cont'd)</b>
1300 – 1315	<b>Course Conclusion</b>
1315 – 1415	<b>COMPETENCY EXAM</b>
1415 – 1430	Presentation of Course Certificates
1430	Lunch & End of Course

**Practical Sessions/Site Visit**

Site visit will be organized during the course for delegates to practice the theory learnt:-



**Course Coordinator**

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