

## COURSE OVERVIEW HE0595

### Certified Fire Fighter Rescue Missions

#### Course Title

Certified Fire Fighter Rescue Missions

#### Course Date/Venue

November 23-27, 2025/TBA Meeting Room, The H Dubai Hotel, Sheikh Zayed Road, 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. Ashraf Mohamed** is a **Senior Security & Emergency Response Specialist** with over **30 years** of practical and industrial experience within the **Oil & Gas, Refinery and Petrochemical** industry. He is a **NEBOSH Approved Instructor** for various certification programs. His expertise lies extensively in the areas of **NEBOSH Fire Safety & Risk Management International Certificate, NEBOSH International General Certificate, NEBOSH Health & Safety Leadership Excellence, Industrial Fire & Rescue Response, Fire Detection & Suppression Systems, Fire Risk Assessments, Rescue Operations, Frontline Response, Firefighting Techniques, Security Emergency Response Plans (ERP), Incident Command Systems (ICS), Integrated Safety & Security Strategies, Emergency Preparedness Initiatives, Risk Control Protocols, Assets & Critical Infrastructure, Emergency Response & Crisis Management, Emergency Response Frameworks, Evacuation Protocols & Drill Execution, Security Risk Management, Threat Assessments, Vulnerability Identification, Mitigation Strategies for Physical & Operational Security, Radiation Security & Protection, Radioactive Materials Handling, Storage & Transportation, Radiation Protection, Radiological Emergency Preparedness, Radioactive Source Protection, Critical Incident Investigation & Command, Post-Incident Investigations, Root Cause Analysis, Security Incident Reports & Corrective Actions, HSE Management Systems and ISO 14001, ISO 9001 and OHSAS 18001/ISO 45001 Standards.** Further. He is also well-versed in **Radiation Safety & Protection, Radioisotopes & Protection Application, HSE Policy & Strategy, Risk Assessment & Management, HAZOP & HAZID, HAZMAT & HAZCOM, As Low as Reasonably Practicable (ALARP), Process Hazard Analysis (PHA), Process Safety Management (PSM), Accident/Incident Investigation, PTW, Gas Testing, Lock Out/Tag Out, Confined Space, H<sub>2</sub>S, Working at Heights, Lifting Operations, Scaffolding, Rigging & Slings, First Aid & CPR, Crane Inspection, Risk Evaluation, Emergency Response Plan, Defensive Driving, Safety Supervision and Environment Management System.** He is currently the **Acting Senior HSE Engineer** wherein he develops and manages the implementation of fire, safety and environment programs for all the employees and contractors.

During his career life, Mr. Ashraf has gained his practical and field experience through his various significant positions as the **Safety & Fire Manager, HSE Manager, Safety & Fire Instructor, Senior HSE & Fire Instructor, Safety Training Instructor, Safety Construction Manager and Safety Section Head** from various companies such as the **ADNOC, Eprome, Foster Wheeler-MIDOR Refinery, Amyria Petroleum Refining Company and Egyptian Refinery Company.**

Mr. Ashraf has a **Bachelor's degree in Geology.** Further, he is a **Certified Instructor/Trainer** and a member of **Society of Petroleum Engineers and Egyptian Society for Safety.** He is an **Approved Lead Tutor in NEBOSH Certificate in Fire Safety, an Approved Tutor in NEBOSH International General Certificate, NEBOSH Health & Safety Leadership Excellence.** He has further held various **Radiation Certifications** like the **Radiation Protection & Peaceful Uses of Radioactive Sources** and the **Applications of Radioisotopes & Protection from Ionizing Radiations** from the **Egyptian Atomic Energy Authority** and has delivered numerous courses, trainings, seminars, workshops and conferences 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.

### **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	<i>Registration &amp; Coffee</i>
0800 – 0815	<i>Welcome &amp; Introduction</i>
0815 – 0830	<b>PRE-TEST</b>
0830 – 0930	<b>Fire Behavior</b> <i>Fire Triangle, Tetrahedron, and Pyramid • Measurements • Chemistry and Physics of Fire • Sources of Heat • Combustion</i>
0930 – 0945	<i>Break</i>
0945 – 1100	<b>Fire Behavior (cont'd)</b> <i>Oxygen and its Effect on Combustion • Vapor Pressure and Vapor Density • Boiling Point • Flammable and Explosive Limits • The Burning Process - Characteristics of Fire Behavior</i>
1100 – 1230	<b>Fire Behavior (cont'd)</b> <i>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</i>
1230 – 1245	<i>Break</i>
1245 – 1420	<b>Overview of the Process Industry</b> <i>Exploration • Production • Enhanced Oil Recovery (EOR) • Secondary Recovery • Tertiary Recovery • Transportation • Refining • Petrochemical • Chemical</i>
1420 – 1430	<b>Recap</b> <i>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</i>
1430	<i>Lunch &amp; End of Day One</i>



**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> <i>Identification of Rescue Device/Tools/Machinery within Classified Hazardous Locations • Rescuer Climb, Equipment Lifting &amp; Positioning</i>
0930 – 0945	<i>Break</i>
0945 – 1100	<b>Rescue Operations (cont'd)</b> <i>Casualty Positioning on Stretcher, Descending &amp; Ascending • Primary &amp; Secondary Casualty Rescue Survey Techniques</i>
1100 – 1230	<b>Rescue Operations (cont'd)</b> <i>Paramedic Service of Casualty in Hazardous High Station, Safe Positioning &amp; Descending • Handling Techniques of Ropes, Ascending/Descending Machines • Confined Space Vertical &amp; Horizontal Casualty Extrication Techniques at/from Standard Height Levels</i>
1230 – 1245	<i>Break</i>
1245 – 1420	<b>Rescue Operations (cont'd)</b> <i>Practice of Unison Rescue Techniques in Utilizing Crane Boom Basket • Manual Joined Rescuer &amp; Casualty Rope Descending Techniques • Confined Space Team Search &amp; Rescue Techniques as well as Structural Internal Rescue Missions</i>
1420 – 1430	<b>Recap</b> <i>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</i>
1430	<i>Lunch &amp; End of Day Four</i>

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

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

### **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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