

# **COURSE OVERVIEW HE0595 Certified Fire Fighter Rescue Missions**

#### **Course Title**

Certified Fire Fighter Rescue Missions

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

November 30-December 04, 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 participants carryout fire fighting and 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 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**<sup>®</sup>). The **H-STK**<sup>®</sup> 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















#### **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.

• 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 NEBOSH International General Certificate, NEBOSH Fire Safety & Risk Management International Certificate and he is a Senior HSE Consultant & Radiation Protection Expert with 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 Radiation Safety & Protection, Radioactive Waste Management, Radiation Protection

Instrumentation, Nuclear & Radiological Safety, Radiation Protection Design, Radioactive Sources Protection, Radioisotopes & Protection Application, Ionizing Radiation, NEBOSH Fire Safety & Risk Management International Certificate, Investigation & Reporting of Incidents, Occupational Safety & Security, Process Safety Management (PSM), Advanced Risk Assessment Practices, Safety Engineering & Risk Management, Environment, Health and Safety Management, Occupational Health & Safety Specialist, Process Safety Management and Compliance, Firefighting Techniques, Fire & Gas Detection System, Fire Fighter & Fire Rescue, HSE Policy & Strategy, HSEMS Development & Implementation, Risk Assessment & Management, HSE Performance Measurement & Monitoring Systems, HSE & Fire Inspection, HAZOP & HAZID, HAZMAT & HAZCOM, As Low as Reasonably Practicable Process Hazard Analysis (PHA), Process Safety Management (PSM), Accident/Incident Investigation, Risk Management, Hazard & Effect Management Process, ALARP System, Isotopes Application & Protection, Safety Induction, PTW, Gas Testing, Lock Out/Tag Out, Confined Space, H2S, Working at Heights, Lifting Operations, Scaffolding, Rigging & Slinging, Incidents Investigations, First Aid & CPR, Crane Inspection, Risk Evaluation, Emergency Response Plan, Defensive Driving, Safety Supervision, Environment Management System, Environmental Impact & Life Cycle Assessment, Pesticide Assessment & Environemntal Control, Behavioural Based Safety, Work Management System and various international codes and standards such as the ISO 9001, OHSAS 18001 and ISO 14001. 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**, **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.

#### Course Fee

**US\$ 5,500** per Delegate + **VAT**. This rate includes H-STK<sup>®</sup> (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day











## **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, 30th of November 2025

Day I.	Sunday, 30 <sup>th</sup> Of November 2025
0730 - 0800	Registration & Coffee
0800 - 0815	Welcome & Introduction
0815 - 0830	PRE-TEST
	Fire Behavior
0830 - 0930	Fire Triangle, Tetrahedron, and Pyramid • Measurements • Chemistry and
	Physics of Fire ● Sources of Heat ● Combustion
0930 - 0945	Break
	Fire Behavior (cont'd)
0945 - 1100	Oxygen and its Effect on Combustion • Vapor Pressure and Vapor Density •
0943 - 1100	Boiling Point • Flammable and Explosive Limits • The Burning Process -
	Characteristics of Fire Behavior
	Fire Behavior (cont'd)
1100 – 1230	Modes of Heat Transfer • Thermal Conductivity of Materials • The Physical
1100 - 1250	State of Fuels and Effect on Combustion • Theory of Fire Extinguishment •
	Unique Fire Events • Classes of Fire
1230 - 1245	Break
	Overview of the Process Industry
1245 – 1420	Exploration • Production • Enhanced Oil Recovery (EOR) • Secondary
1243 - 1420	Recovery • Tertiary Recovery • Transportation • Refining • Petrochemical
	Chemical
	Recap
1420 – 1430	Using this Course Overview, the Instructor(s) will Brief Participants about the
1420 - 1430	Topics that were Discussed Today and Advise Them of the Topics to be Discussed
	Tomorrow
1430	Lunch & End of Day One

Day 2: Monday, 01st of December 2025

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		Physical Properties of Hydrocarbons
	0730 - 0930	Characteristics of Hydrocarbons • Lower Explosive Limit (LEL)/Upper Explosive Limit (UEL) • Flash Point (FP) • Autoignition Temperature (AIT)
		Vapor Density
	0930 - 0945	Break















	Physical Properties of Hydrocarbons(cont'd)
0945 - 1100	Vapor Pressure ● Specific Gravity ● Flammable ● Combustible ● Heat of
	Combustion • Description of Some Common Hydrocarbons
	Characteristics of Hydrocarbon Releases, Fires & Explosions
	Hydrocarbon Releases • Gaseous Releases • Mists or Spray Releases • Liquid
1100 - 1230	Releases • Nature and Chemistry of Hydrocarbon Combustion • Hydrocarbon
	Fires • Nature of Hydrocarbon Explosions • Semi-Confined Explosion
	Overpressures
1230 - 1245	Break
	Characteristics of Hydrocarbon Releases, Fires & Explosions (cont'd)
	Vapor Cloud Explosion Overpressures • Boiling Liquid Expanding Vapor
1245 – 1420	Explosions (BLEVE) • Smoke and Combustion Gases • Mathematical
1243 - 1420	Consequence Modeling • Methods of Flame Extinguishment • Selection of
	Fire Control and Suppression Methods • Terminology of Hydrocarbon
	Explosions and Fires
	Recap
1420 – 1430	Using this Course Overview, the Instructor(s) will Brief Participants about the
1420 - 1430	Topics that were Discussed Today and Advise Them of the Topics to be Discussed
	Tomorrow
1430	Lunch & End of Day Two

Tuesday, 02<sup>nd</sup> of December 2025 Day 3:

Day 3:	ruesday, uz or December 2025
_	Rescue Procedures
0730 - 0930	Hazards Associated with Rescue Operations • Search of Burning Structures •
	Victim Removal, Drags and Carries
0930 - 0945	Break
0045 1100	Rescue Procedures (cont'd)
0945 – 1100	Extrication from Motor Vehicles • Specialized Rescue Situations and Tools
	Forcible Entry
1100 - 1230	Forcible Entry Tools • Safety with Forcible Entry Tools • Maintenance of
	Forcible Entry Tools • Construction and Forcible Entry
1230 – 1245	Break
	Forcible Entry (cont'd)
1245 - 1420	<i>Methods of Forcible Entry</i> • <i>Windows</i> • <i>Breaching Walls and Floors</i> • <i>Tool</i>
	Assignments
	Recap
1420 1420	Using this Course Overview, the Instructor(s) will Brief Participants about the
1420 – 1430	Topics that were Discussed Today and Advise Them of the Topics to be Discussed
	Tomorrow
1430	Lunch & End of Day Three

Wednesday, 03<sup>rd</sup> of December 2025 Day 4:

0730 – 0930	Rescue Operations  Identification of Rescue Device/Tools/Machinery within Classified Hazardous  Locations ● Rescuer Climb, Equipment Lifting & Positioning
0930 - 0945	Break
0945 – 1100	Rescue Operations (cont'd)  Casualty Positioning on Stretcher, Descending & Ascending • Primary & Secondary Casualty Rescue Survey Techniques













1100 - 1230	Rescue Operations (cont'd)  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	Rescue Operations (cont'd)  Practice of Unison Rescue Techniques in Utilizing Crane Boom Basket   Manual Joined Rescuer & Casualty Rope Descending Techniques   Confined Space Team Search & Rescue Techniques as well as Structural Internal Rescue Missions
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

Thursday, 04th of December 2025 Day 5:

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

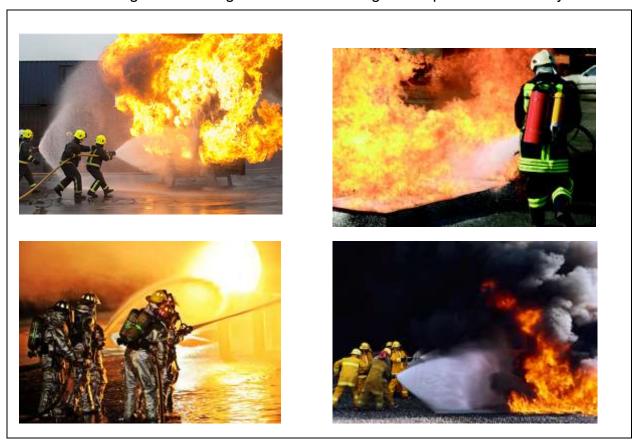








<u>Practical Sessions/Site Visit</u>
Site visit will be organized during the course for delegates to practice the theory learnt:-



<u>Course Coordinator</u>
Mari Nakintu, Tel: +971 2 30 91 714, Email: <u>mari1@haward.org</u>



