

COURSE OVERVIEW HE0595 Certified Fire Fighter Rescue Missions

Course Title

Certified Fire Fighter Rescue Missions

Course Reference

HE0595

Course Duration/Credits

Five days/3.0 CEUs/30 PDHs

Course Date/Venue



Session(s)	Date	Venue
1	January 20-24, 2025	Ajman Meeting Room, Grand Millennium Al Wahda Hotel, Abu Dhabi, UAE
2	April 20-24, 2025	Al Khobar Meeting Room, Hilton Garden Inn, Al Khobar, KSA
3	July 06-10, 2025	Oryx Meeting Room, Double Tree by Hilton Al Saad, Doha, Qatar
4	October 26-30, 2025	Boardroom 1, Elite Byblos Hotel Al Barsha, Sheikh Zayed Road, Dubai, UAE

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.



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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, sample video clips of the instructor's actual lectures & practical sessions during the course 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.



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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:-







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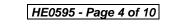




(2) Official Transcript of Records will be provided to the successful delegates with the equivalent number of ANSI/IACET accredited Continuing Education Units (CEUs) earned during the course











Certificate Accreditations

Certificates are accredited by the following international accreditation organizations: -



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.

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BAC 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.

Accommodation

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



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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, 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-ofthe-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.



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Course Fee

Abu Dhabi	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.
Al Khobar	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.
Doha	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.
Dubai	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:

Dav 1

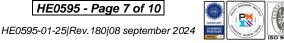
Registration & Coffee
Welcome & Introduction
PRE-TEST
Fire Behavior
Fire Triangle, Tetrahedron, and Pyramid • Measurements • Chemistry and
<i>Physics of Fire</i> • <i>Sources of Heat</i> • <i>Combustion</i>
Break
Fire Behavior (cont'd)
Oxygen and its Effect on Combustion • Vapor Pressure and Vapor Density •
Boiling Point • Flammable and Explosive Limits • The Burning Process -
Characteristics of Fire Behavior
Fire Behavior (cont'd)
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
Break
Overview of the Process Industry
Exploration • Production • Enhanced Oil Recovery (EOR) • Secondary
Recovery • Tertiary Recovery • Transportation • Refining • Petrochemical
Chemical
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 One

Dav 2

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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)



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	<i>Vapor Density</i>
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	<i>Releases</i> • <i>Nature and Chemistry of Hydrocarbon Combustion</i> • <i>Hydrocarbon</i>
	Fires • Nature of Hydrocarbon Explosions • Semi-Confined Explosion
	Overpressures
1230 - 1245	Break

1245 - 1420	<i>Characteristics of Hydrocarbon Releases, Fires & Explosions (cont'd)</i> <i>Vapor Cloud Explosion Overpressures</i> • Boiling Liquid Expanding Vapor <i>Explosions (BLEVE)</i> • Smoke and Combustion Gases • Mathematical <i>Consequence Modeling</i> • Methods of Flame Extinguishment • Selection of <i>Fire Control and Suppression Methods</i> • Terminology of Hydrocarbon <i>Explosions and Fires</i>
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

Dav 3

0730 – 0930	Rescue Procedures
	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	<i>Extrication from Motor Vehicles</i> • <i>Specialized Rescue Situations and Tools</i>
	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	Methods of Forcible Entry • Windows • Breaching Walls and Floors • Tool
	Assignments
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 Three

Day 4

	Rescue Operations
0730 - 0930	Identification of Rescue Device/Tools/Machinery within Classified Hazardous
	Locations • Rescuer Climb, Equipment Lifting & Positioning



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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 Techniquesat/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

Dav 5

Day 5	
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
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Practical Sessions/Site Visit Site visit will be organized during the course for delegates to practice the theory learnt:-



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