



## COURSE OVERVIEW DE1050 Directional Drilling & Surveying

### Course Title

Directional Drilling & Surveying

### Course Date/Venue

Please see page 3

### Course Reference

DE1050

### Course Duration/Credits

Five days/3.0 CEUs/30 PDHs



### Course Description



***This practical and highly-interactive course includes real-life case studies and exercises where participants will be engaged in a series of interactive small groups and class workshops.***

This course is designed to provide participants with a detailed and up-to-date overview of directional drilling and surveying. It covers the directional drilling fundamentals and terminology; the fundamentals, applications and limitations; the terminology, well objectives and target issues; the well planning positioning and coordinating systems; the proper surveying and advanced well planning; the survey calculation methods; the anti-collision and well planning; and the surveying tools, MWD, LWD, mudlogging and downhole equipment.



During this interactive course, participants will learn the drilling tools and deflection methods; the drilling motors overview; the BHA design and rotary steerable systems; the well planning and path design; the directional well path design; the horizontal well planning and calculations; the horizontal drilling planning and drill string design; the torque, drag, shocks and vibrations; the hole cleaning and wellbore stability; and the multilateral wells, geosteering and directional drilling problems and solutions.





### **Course Objectives**

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

- Apply and gain in-depth knowledge on directional drilling and surveying
- Discuss the directional drilling fundamentals and terminology comprising of fundamentals, applications and limitations as well as terminology, well objectives and target issues
- Carryout well planning positioning and coordinate systems as well as employ surveying and advanced well planning
- Apply survey calculation methods and discuss anti-collision and well planning
- Recognize the surveying tools, MWD, LWD, mudlogging and downhole equipment
- Identify the drilling tools, deflection methods and drilling motors
- Illustrate BHA design and rotary steerable systems including well planning and path design
- Employ directional well path design, horizontal well planning and calculations, horizontal drilling planning and drill string design
- Recognize torque, drag, shocks and vibrations as well as hole cleaning and wellbore stability
- Discuss the multilateral wells, geosteering, directional drilling problems and solutions

### **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 directional drilling and surveying for drilling engineers, drilling supervisors, directional drillers, and service company personnel with basic drilling engineering skills.

### **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 Date/Venue

Session(s)	Date	Venue
1	April 19-23, 2026	Meeting Plus 9, City Centre Rotana, Doha, Qatar
2	June 07-11, 2026	Tamra Meeting Room, Al Bandar Rotana Creek, Dubai, UAE
3	August 09-13, 2026	Pierre Lotti Meeting Room, Movenpick Hotel Istanbul Golden Horn, Istanbul, Turkey
4	September 27-October 01, 2026	Meeting Plus 9, City Centre Rotana, Doha, Qatar
5	October 12-16, 2026	Salon Expo, NH Hotel Plaza de Armas, Seville, Spain
6	December 13-17, 2026	Meeting Room 4, Four Seasons Hotel Cairo at Nile Plaza, Corniche El Nil, Garden City, Cairo, Egypt
7	January 24-28, 2027	Tamra Meeting Room, Al Bandar Rotana Creek, Dubai, UAE
8	March 21-25, 2027	Pierre Lotti Meeting Room, Movenpick Hotel Istanbul Golden Horn, Istanbul, Turkey

### Course Fee

Istanbul	<b>US\$ 8,500</b> per Delegate + VAT. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.
Doha	<b>US\$ 8,500</b> per Delegate. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.
Seville	<b>US\$ 8,800</b> per Delegate + VAT. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.
Dubai	<b>US\$ 8,000</b> per Delegate + VAT. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.
Cairo	<b>US\$ 8,000</b> per Delegate + VAT. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

### Accommodation

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





## **Course Certificate(s)**

Internationally recognized certificates will be issued to all participants of the course who completed a minimum of 80% of the total tuition hours.

## **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.



### Course Instructor

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. Samer Shukri**, BSc, IADC, IWCF, is a **Senior Drilling & Petroleum Engineer** with over **25 years** of **offshore** and **onshore** experience in the **Oil & Gas, Refinery & Petrochemical** industries. His wide expertise includes **Enhanced Oil Recovery (EOR)**, **Improved Oil Recovery (IOR)**, **Oil Recovery Enhancement Techniques**, **Water Filtration Systems & Oil Recovery System**, **IADC WELLSHARP Drilling Operations Supervisor Combination** Both Surface & Subsea Stack, **IWCF Drilling Well Control**, **WellCAP Driller**, **WellCAP Supervisor**, **Well Control & Blow Out Prevention**, **Workovers & Completions**, **Well Completion** Design & Operations, **Well Intervention**, **Well Life Cycle**, **Well Stimulation & Workover Planning**, **Workover Practices**, **Workover Operations**, **Well Integrity System**, **Well Control**, **Oil & Water Wells**, **Workover/Remedial Operations & Heavy Oil Technology**, **Plug & Abandonment of Oil & Gas Wells**, **Petroleum Engineering**, **Open Hole & Cased Hole Logs**, **Petroleum Risk & Decision Analysis**, **Well Testing Analysis**, **Stimulation Operations**, **Coiled Tubing Operations**, **Coiled Tubing Equipment**, **Rigless Operations**, **Reserves Evaluation**, **Reservoir Fluid Properties**, **Reservoir Engineering & Simulation Studies**, **Reservoir Monitoring**, **Geology & Reservoir Engineering**, **Artificial Lift Design**, **Gas Operations**, **Applied Water Technology**, **Oil & Gas Production**, **X-mas Tree & Wellhead Operations & Testing**, **Wellbore Design & Construction**, **Drilling Fluids & Solids Control**, **Drilling Fluids & Cementing Operations**, **Drilling Practices & Techniques**, **Stuck Piping & Fishing Operations**, **Rig Equipment Maintenance & Inspection**, **Rigging & Lifting Operations**, **Artificial Lift Systems (Gas Lift, ESP and Rod Pumping)**, **Well Cementing**, **Oil Field Cementing**, **Production Optimization**, **PLT Correlation**, **Slickline Operations**, **Well Testing**, **Production Logging**, **Wireline Logging**, **Wireline Technology**, **Wireline Fishing Operations**, **Project Evaluation & Economic Analysis**. Further, he is also well-versed in **Marine Environment Protection**, **Maritime Professional Training**, **Operational Audit**, **Improvement**, **Planning & Management**, **Climate Change & Emissions Trading Services**, **International Trade & Shipping**, **Fitness for Service-API 579**, **Refining Process & Petroleum Products**, **OSHA** (General Industry & Construction), **IOSH** (Managing Safely, Working Safely), **HSE Standards & Procedures** in the Oilfield, **HSE Principles**, **Incident Prevention & Incidents**, **Working at Height**, **First Aid**, **H2S Awareness**, **Defensive Driving**, **Risk Assessment**, **Authorized Gas Tester (AGT)**, **Confined Space Entry (CSE)**, **Root Cause Analysis (RCA)**, **Negotiation & Persuasion Skills**, **ISO-9001 Quality Management System (QMS)**, **ISO-14001 Environmental Management System (EMS)**, **ISO-45001 Occupational Health and Safety Management System (OHSMS)**, **ISO-17020 Conformity Assessment**, **ISO/TS-29001 Quality Management System**, **IOS-50001-Energy Management System (EnMS)** and **Basic Offshore Safety Induction & Emergency**. Currently, he is actively involved in **Project Management** with special emphasis in **commissioning of new wells**, **completion design**, **well integrity management**, **production technology** and field optimization, performing conceptual studies, economic analysis with risk assessment and field development planning.

During his career life, Mr. Samer has gained his field experience through his various significant positions and dedication as the **Senior Production Engineer**, **Well Services Department Head**, **Senior Well Services Supervisor**, **Senior Well Integrity Engineer**, **Senior HSE Engineer**, **Well Services Supervisor**, **Drilling/Workover Supervisor**, **International oil & Gas Trainer**, **Leadership & Management Instructor** and **Senior Instructor/Trainer** from the various international companies such as the ADCO, Al Furat Petroleum Company (AFPC), Syrian Petroleum Company (SPC), Petrotech, Global Horizon-UK, HDT, Petroleum Engineers Association, STC, Basra University and Velesto Drilling Academy, just to name a few.

Mr. Samer has **Bachelor's** degree in **Petroleum Engineering**. Further, he is an a **Certified IADC WELLSHARP Instructor**, **Accredited IWCF Drilling & Well Intervention Instructor**, a **Certified Instructor/Trainer**, a **Certified Train-the-Trainer** and further delivered innumerable training courses, seminars, conferences and workshops worldwide.





## 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

0730 – 0800	Registration & Coffee
0800 – 0815	Welcome & Introduction
0815 – 0830	<b>PRE-TEST</b>
0830 – 0930	<b>Directional Drilling Fundamentals &amp; Terminology</b>
0930 – 0945	Break
0945 – 1100	<b>Fundamentals, Applications &amp; Limitations</b>
1100 – 1215	<b>Terminology, Well Objectives &amp; Target Issues</b>
1215 – 1230	Break
1230 – 1330	<b>Well Planning: Positioning &amp; Coordinate Systems</b>
1330 – 1420	<b>Surveying &amp; Advanced Well Planning</b>
1420 – 1430	<b>Recap</b>
1430	Lunch & End of Day One

### Day 2

0730 – 0930	<b>Survey Calculation Methods</b>
0930 – 0945	Break
0945 – 1100	<b>Anti-Collision &amp; Well Planning</b>
1100 – 1215	<b>Surveying Tools</b>
1215 – 1230	Break
1230 – 1300	<b>Wellbore Surveying &amp; Survey Instrument</b>
1300 – 1330	<b>MWD, LWD &amp; Mudlogging</b>
1330 – 1420	<b>Downhole Equipment</b>
1420 – 1430	<b>Recap</b>
1430	Lunch & End of Day Two

### Day 3

0730 – 0930	<b>Drilling Tools &amp; Wellbore Deflection Methods</b>
0930 – 0945	Break
0945 – 1030	<b>Drilling Motors Overview</b>
1030 – 1100	<b>Directional Bottom Hole Assemblies</b>
1100 – 1130	<b>BHA Design</b>
1130 – 1215	<b>Drilling Fluid &amp; Hydraulics</b>
1215 – 1230	Break
1230 – 1330	<b>Rotary Steerable Systems</b>
1330 – 1420	<b>Well Planning &amp; Path Design</b>
1420 – 1430	<b>Recap</b>
1430	Lunch & End of Day Three

### Day 4

0730 – 0830	<b>Directional Well Path Design</b>
0830 – 0930	<b>Horizontal Well Planning &amp; Calculations</b>
0930 – 0945	Break
0945 – 1100	<b>Horizontal Drilling Planning</b>

1100 – 1215	<b>Drill String Design</b>
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1215 – 1230	<i>Break</i>
1230 – 1300	<b>Torque, Drag, Shocks &amp; Vibrations</b>
1300 – 1330	<b>Torque &amp; Drag Calculation</b>
1330 – 1420	<b>Hole Cleaning &amp; Wellbore Stability</b>
1420 – 1430	<b>Recap</b>
1430	<i>Lunch &amp; End of Day Four</i>

### Day 5

0730 – 0930	<b>Hole Cleaning</b>
0930 – 0945	<i>Break</i>
0945 – 1100	<b>Well Bore Stability</b>
1100 – 1215	<b>Introduction to Multilateral Wells</b>
1215 – 1230	<i>Break</i>
1230 – 1300	<b>Geosteering</b>
1300 – 1330	<b>Directional Drilling Problems &amp; Solutions</b>
1330 – 1345	<b>Formats &amp; Documents</b>
1345 – 1400	<b>Course Conclusion</b>
1400 – 1415	<b>POST-TEST</b>
1415 – 1430	<i>Presentation of Course Certificates</i>
1430	<i>Lunch &amp; End of Course</i>

### Practical Sessions

This practical and highly-interactive course includes real-life case studies and exercises:-



### Course Coordinator

Jaryl Castillo, Tel: +974 6652 9196, Email: [jaryl@haward.org](mailto:jaryl@haward.org)

