COURSE OVERVIEW DE0146
Fundamentals of Formation Evaluation

Course Title
Fundamentals of Formation Evaluation

Course Date/Venue
Please refer to page 5

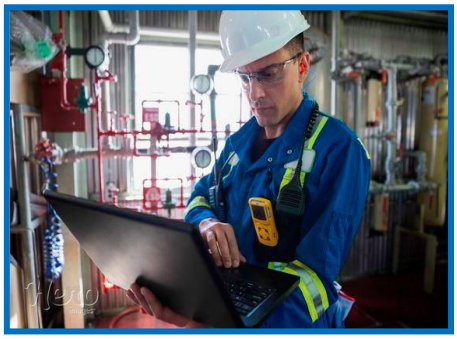
Course Reference
DE0146

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 Fundamentals of Formation Evaluation. It covers the formation evaluation and its significance in the oil and gas industry; the key formation evaluation parameters, roles and responsibilities of formation evaluation professionals and different formation evaluation methods; the well logging techniques and its applications; the types of well logs, interpreting well logs and integrating well logs for formation evaluation; and the advanced well logging techniques, core sampling techniques, core analysis methods and integrating core analysis data with well log data.



Further, the course will also discuss the petrophysics and its role in formation evaluation; the petrophysical properties, petrophysical analysis techniques and interpretation and estimate rock properties from well logs and core data; the formation evaluation challenges in unconventional reservoirs and specialized well logging and analysis techniques; and the reservoir characterization and resource estimation in unconventional reservoirs.

During this interactive course, participants will learn the reservoir fluid analysis, fluid sampling techniques and incorporating reservoir fluid data into formation evaluation; the formation pressure evaluation, pressure measurement techniques, analysis and interpretation of formation pressure data; the well testing techniques and well testing data analysis; the interpretation and integration of well testing and production data for formation evaluation; the reservoir characterization and integrating all formation evaluation data for reservoir characterization; and the reservoir modelling and simulation, uncertainty analysis and risk assessment in formation evaluation.

Course Objectives

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

- Apply and gain a basic knowledge on formation evaluation
- Discuss formation evaluation and its significance in the oil and gas industry
- Recognize the key formation evaluation parameters, roles and responsibilities of formation evaluation professionals and different formation evaluation methods
- Carryout well logging techniques and its applications, identify the types of well logs, interpret well logs and integrate well logs for formation evaluation
- Employ advanced well logging techniques, core sampling techniques, core analysis methods and integrating core analysis data with well log data
- Discuss petrophysics and its role in formation evaluation and identify petrophysical properties
- Apply petrophysical analysis techniques and interpretation and estimate rock properties from well logs and core data
- Identify formation evaluation challenges in unconventional reservoirs and apply specialized well logging and analysis techniques
- Describe reservoir characterization and resource estimation in unconventional reservoirs
- Carryout reservoir fluid analysis, fluid sampling techniques and incorporating reservoir fluid data into formation evaluation
- Employ formation pressure evaluation, pressure measurement techniques and analysis and interpretation of formation pressure data
- Carryout well testing techniques, well testing data analysis and interpretation and integration of well testing and production data for formation evaluation
- Discuss reservoir characterization and integrate all formation evaluation data for reservoir characterization
- Illustrate reservoir modelling and simulation including uncertainty analysis and risk assessment in formation evaluation

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 a basic and up-to-date overview of formation evaluation for geologists, reservoir engineers, geophysicists, technical assistants and other technical staff.

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(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. Samer Shukri, BSc, 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 **Workovers & Completions**, **Well Completion** Design & Operations, **Well Intervention**, **Well Life Cyle**, **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**, **Well Control & Blow Out Prevention**, **Stuck Piping & Fishing** Operations, **Rig Equipment** Maintenance & Inspection, **Rigging & Lifting** Operations, **WellCAP** Driller, **WellCAP** Supervisor, **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 (**EnM**S) 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, HDTC, 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 **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 Date/Venue

Session(s)	Date	Venue
1	June 29-July 03, 2026	Ruben Boardroom, The Rubens at The Palace, Buckingham Palace Road, London, United Kingdom
2	August 31- September 04, 2026	Salon Expo, NH Hotel Plaza de Armas, Seville, Spain
3	September 06-10, 2026	Meeting Plus 9, City Centre Rotana, Doha, Qatar
4	September 20-24, 2026	Pierre Lotti Meeting Room, Movenpick Hotel Istanbul Golden Horn, Istanbul, Turkey
5	October 25-29, 2026	Tamra Meeting Room, Al Bandar Rotana Creek, Dubai, UAE
6	December 13-17, 2026	Meeting Room 4, Four Seasons Hotel Cairo at Nile Plaza, Corniche El Nil, Garden City, Cairo, Egypt
7	January 03-07, 2027	Meeting Plus 9, City Centre Rotana, Doha, Qatar
8	January 24-28, 2027	Tamra Meeting Room, Al Bandar Rotana Creek, Dubai, UAE
9	February 21-25, 2027	Ruben Boardroom, The Rubens at The Palace, Buckingham Palace Road, London, United Kingdom

Accommodation

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

Course Fee

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

0730 – 0800	*Registration & Coffee*
0800 – 0815	*Welcome & Introduction*
0815 – 0830	***PRE-TEST***
0830 – 1030	***Introduction to Formation Evaluation*** *Formation Evaluation & Its Significance in the Oil & Gas Industry ● Key Formation Evaluation Parameters ● Roles & Responsibilities of Formation Evaluation Professionals ● Different Formation Evaluation Methods*
1030 – 1045	*Break*
1045 – 1200	***Well Logging Techniques (cont'd)*** *Well Logging & Its Applications ● Types of Well Logs: Resistivity, Porosity, Sonic, Density, & Neutron Logs*
1200 – 1300	***Well Logging Techniques (cont'd)*** *Interpretation of Well Logs*
1300 – 1315	*Break*
1315 - 1420	***Well Logging Techniques (cont'd)*** *Integration of Well Logs for Formation Evaluation*
1420 – 1430	***Recap***
1430	*Lunch & End of Day One*

Day 2

0730 – 0930	***Advanced Well Logging Methods*** *Advanced Well Logging Techniques: Image Logs, Dip Logs, & NMR Logs ● Interpretation & Analysis of Advanced Well Logs*
0930 – 0945	*Break*
0945 – 1130	***Advanced Well Logging Methods (cont'd)*** *Case Studies Showcasing the Application of Advanced Well Logs in Formation Evaluation*
1130 – 1230	***Core Analysis & Sampling*** *Core Analysis & Its Importance in Formation Evaluation ● Core Sampling Techniques & Considerations*
1230 – 1245	*Break*

1245 - 1420	***Core Analysis & Sampling (cont'd)*** *Core Analysis Methods: Porosity, Permeability, & Fluid Saturation Measurements ● Integration of Core Analysis Data with Well Log Data*
1420 – 1430	***Recap***
1430	*Lunch & End of Day Two*

Day 3

0730 – 0930	***Petrophysics & Rock Properties*** *Petrophysics & Its Role in Formation Evaluation ● Petrophysical Properties: Porosity, Water Saturation, & Permeability*
0930 – 0945	*Break*
0945 – 1130	***Petrophysics & Rock Properties (cont'd)*** *Petrophysical Analysis Techniques & Interpretation ● Estimating Rock Properties from Well Logs & Core Data*
1130 – 1230	***Formation Evaluation in Unconventional Reservoirs*** *Formation Evaluation Challenges in Unconventional Reservoirs (e.g., Shale Gas, Tight Oil) ● Specialized Well Logging & Analysis Techniques for Unconventional Reservoirs*
1230 – 1245	*Break*
1245 - 1420	***Formation Evaluation in Unconventional Reservoirs (cont'd)*** *Reservoir Characterization & Resource Estimation in Unconventional Reservoirs*
1420 – 1430	***Recap***
1430	*Lunch & End of Day Three*

Day 4

0730 – 0930	***Reservoir Fluid Analysis*** *Fluid Sampling Techniques & Considerations*
0930 – 0945	*Break*
0945 – 1130	***Reservoir Fluid Analysis (cont'd)*** *Analysis of Fluid Samples: Composition, Viscosity, Density, & Phase Behavior ● Incorporating Reservoir Fluid Data into Formation Evaluation*
1130 – 1230	***Formation Pressure Evaluation*** *Pressure Measurement Techniques: Wireline, Mud Logging, & Formation Testing*
1230 – 1245	*Break*
1245 - 1420	***Formation Pressure Evaluation (cont'd)*** *Analysis & Interpretation of Formation Pressure Data ● Determining Reservoir Pressure & Pressure Gradients*
1420 – 1430	***Recap***
1430	*Lunch & End of Day Four*

Day 5

0730 – 0930	***Well Testing & Production Data Analysis*** *Well Testing & Its Role in Formation Evaluation ● Well Testing Techniques: Drawdown Tests, Buildup Tests, & Interference Tests*
0930 – 0945	*Break*
0945 – 1130	***Well Testing & Production Data Analysis (cont'd)*** *Analysis & Interpretation of Well Testing Data ● Integration of Well Testing & Production Data for Formation Evaluation*
1130 – 1230	***Reservoir Characterization & Evaluation*** *Reservoir Characterization ● Integration of All Formation Evaluation Data for Reservoir Characterization*

1230 – 1245	*Break*
1245 - 1345	***Reservoir Characterization & Evaluation (cont'd)*** *Reservoir Modeling & Simulation ● Uncertainty Analysis & Risk Assessment in Formation Evaluation*
1345 – 1400	***Course Conclusion***
1400 – 1415	***POST-TEST***
1415 – 1430	*Presentation of Course Certificates*
1430	*Lunch & End of Course*

Practical Sessions

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

Course Coordinator

Mari Nakintu, Tel: +971 2 30 91 714, Email: mari1@haward.org