



COURSE OVERVIEW DE0146 Fundamentals of Formation Evaluation

Course Title

Fundamentals of Formation Evaluation

Course Date/Venue

Session 1: February 08-12, 2026/Meeting Plus
9, City Centre Rotana, Doha Qatar

Session 2: September 06-10, 2026/Meeting Plus
9, City Centre Rotana, Doha Qatar

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 “Howard 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

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**. 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.

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 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, 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 (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, 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 Fee

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.

Accommodation

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

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

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