



COURSE OVERVIEW DE0146 Fundamentals of Formation Evaluation

Course Title

Fundamentals of Formation Evaluation

Course Date/Venue

Session 1: August 03-07, 2025/Meeting Plus 8, City Centre Rotana Doha Hotel, Doha, Qatar

Session 2: December 21-25, 2025/Meeting Plus 8, City Centre Rotana Doha Hotel, Doha, Qatar

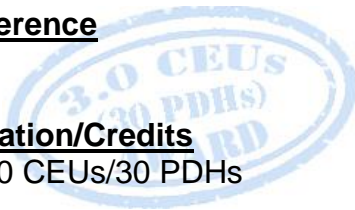


Course Reference

DE0146

Course Duration/Credits

Five days/3.0 CEUs/30 PDHs



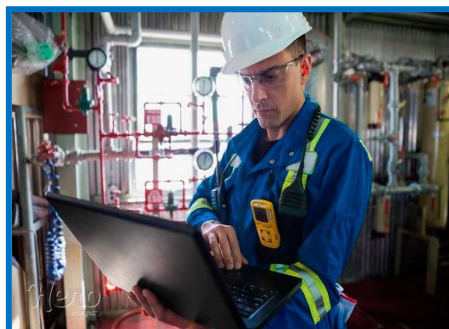
Course Description



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

Training Methodology

This interactive training course includes the following training methodologies as a percentage of the total tuition hours:-

- 30% Lectures
- 20% Workshops & Work Presentations
- 30% Case Studies & Practical Exercises
- 20% Software, Simulators & Videos

In an unlikely event, the course instructor may modify the above training methodology before or during the course for technical reasons.

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.

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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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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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.



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:



Dr. Chris Kapetan, PhD, MSc, BSc, is a **Senior Drilling & Process Engineer** with over **40 years** of international experience within the **onshore and offshore oil and gas** industry. His wide experience covers **Asset Operational Integrity** for Operations, **Process Plant** Operations, Control & Troubleshooting, **Plant Shutdown System & Flare Systems**, **Heat Exchangers & Fired Heaters** Operation & Troubleshooting, **Gas Conditioning**, Treatment & Processing Technology, **Production Operations** in the Oil & Gas Fields & **Surface Facilities**, **LNG Process**, **Applied Process** Engineering Elements, **Production**

Control Systems, Well Commissioning & Crude Oil Specifications, **Hydrogenation & Gasification** Technology, **Physical & Chemical Solvents**, Sulfide Stress Cracking (**SSC**), Hydrogen Induced Cracking (**HIC**), **Corrosion**, Steels & Alloys, **Fertilizer Manufacturing** Process Technology, **Fertilizer Storage Management** (Ammonia & Urea), **Process Calculation Methods**, **Directional Planning**, **Completion Design**, **Directional Surveying**, **Drilling Fluids**, **Matrix Acidizing**, **Hydraulic Fracturing**, **Well Completion Design & Operation**, **Cased Hole Formation Evaluation**, **Cased Hole Logs**, **Production Management**, **Drilling Operations**, **Directional Drilling**, **Gas Lift Operations**, **Petroleum Business**, **Petroleum Economics**, **Gas Lift Valve Changing & Installation**, **Horizontal & Multilateral Wells**, **Well Stimulation & Control** and **Workover Planning**, **Completions & Workover**, **Rig Sizing**, **Hole Cleaning & Logging**, **Well Completion**, **Servicing & Work-Over Operations**, **Practical Reservoir Engineering**, **X-mas Tree & Wellhead Operations**, **Maintenance & Testing**, **Advanced Petrophysics/Interpretation of Well Composite**, **Construction Integrity & Completion**, **Coiled Tubing Technology**, **Corrosion Control**, **Wireline & Coil Tubing**, **Pipeline Pigging**, **Corrosion Monitoring**, **Cathodic Protection**, **Root Cause Analysis (RCA)**, **Root Cause Failure Analysis (RCFA)**, **Production Safety** and **Delusion of Asphalt**. Currently, he is the **Operations Manager** at **GEOTECH** and an independent **Drilling Operations Consultant** of various engineering services providers to the international clients as he offers his expertise in many areas of the **drilling discipline** and is well **recognized & respected** for his process and procedural expertise as well as ongoing participation, interest and experience in continuing to promote technology to producers around the world. Currently, he is the **Operations Consultant & the Technical Advisor** at **GEOTECH** and an independent **Drilling Operations Consultant** of various engineering services providers to the international clients as he offers his expertise in many areas of the **drilling & petroleum** discipline and is well **recognized & respected** for his process and procedural expertise as well as ongoing participation, interest and experience continuing to promote technology to producers around the world.

Throughout his long career life, Dr. Chris has worked for many international companies and has spent several years **managing technically complex wellbore interventions** in both **drilling & servicing**. He is a **well-regarded** for his **process and procedural expertise**. Further, he was the **Operations Manager** at **ETP Crude Oil Pipeline Services** where he was fully responsible for optimum operations of crude oil pipeline, **workover** and **directional drilling**, **drilling rigs** and equipment, drilling of various geothermal deep wells and **exploration wells**. Dr. Chris was the **Drilling & Workover Manager & Superintendent** for **Kavala Oil** wherein he was responsible for supervision of **drilling operations** and **offshore exploration**, quality control of performance of **rigs**, **coiled tubing**, **crude oil** transportation via pipeline and abandonment of **well** as per the API requirements. He had occupied various key positions as the **Drilling Operations Consultant**, **Site Manager**, **Branch Manager**, **Senior Drilling & Workover Manager & Engineer**, **Drilling & Workover Engineer**, **Process Engineer**, **Operations Consultant** and **Technical Advisor** in several petroleum companies responsible mainly on an **offshore sour oil field** (under water flood and gas lift) and a gas field. Further, Dr. Chris has been a **Professor** of the **Oil Technology College**.

Dr. Chris has **PhD** in **Reservoir Engineering** and a **Master's** degree in **Drilling & Production Engineering** from the **Petrol-Gaze Din Ploiesti University**. Further, he is a **Certified Surfaced BOP Stack Supervisor** of **IWCF**, a **Certified Instructor/Trainer**, a **Certified Trainer/Assessor/Internal Verifier** by the **Institute of Leadership & Management (ILM)** and has conducted numerous short courses, seminars and workshops and has published several technical books on **Production Logging**, **Safety Drilling Rigs** and **Oil Reservoir**.





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) <i>Petrophysical Analysis Techniques & Interpretation • Estimating Rock Properties from Well Logs & Core Data</i>
1130 – 1230	Formation Evaluation in Unconventional Reservoirs <i>Formation Evaluation Challenges in Unconventional Reservoirs (e.g., Shale Gas, Tight Oil) • Specialized Well Logging & Analysis Techniques for Unconventional Reservoirs</i>
1230 – 1245	<i>Break</i>
1245 - 1420	Formation Evaluation in Unconventional Reservoirs (cont'd) <i>Reservoir Characterization & Resource Estimation in Unconventional Reservoirs</i>
1420 – 1430	Recap
1430	<i>Lunch & End of Day Three</i>

Day 4

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

Day 5

0730 – 0930	Well Testing & Production Data Analysis <i>Well Testing & Its Role in Formation Evaluation • Well Testing Techniques: Drawdown Tests, Buildup Tests, & Interference Tests</i>
0930 – 0945	<i>Break</i>
0945 – 1130	Well Testing & Production Data Analysis (cont'd) <i>Analysis & Interpretation of Well Testing Data • Integration of Well Testing & Production Data for Formation Evaluation</i>
1130 – 1230	Reservoir Characterization & Evaluation <i>Reservoir Characterization • Integration of All Formation Evaluation Data for Reservoir Characterization</i>
1230 – 1245	<i>Break</i>
1245 - 1345	Reservoir Characterization & Evaluation (cont'd) <i>Reservoir Modeling & Simulation • Uncertainty Analysis & Risk Assessment in Formation Evaluation</i>
1345 – 1400	Course Conclusion
1400 – 1415	POST-TEST
1415 – 1430	<i>Presentation of Course Certificates</i>
1430	<i>Lunch & End of Course</i>



Practical Sessions

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



Course Coordinator

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