

**COURSE OVERVIEW DE0290**  
**Introduction to Petroleum Engineering**

**Course Title**

Introduction to Petroleum Engineering

**Course Date/Venue**

Session 1: January 05-09, 2025/Oryx Meeting Room, DoubleTree by Hilton Al Saad, Doha, Qatar  
 Session 2: July 06-10, 2025/ Oryx Meeting Room, DoubleTree by Hilton Al Saad, Doha, Qatar



**Course Reference**

DE0290



**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 petroleum engineering practices. It covers the geophysics and geology; the exploration drilling, rig types and onshore petroleum engineering; the offshore petroleum engineering; the well design and elements and the elements of a well program; the completion technology onshore type wells and offshore drilling; and the operations of horizontal wells and multilaterals.



During this interactive course, participants will learn the production technology; the special techniques, production systems and flowing wells; the artificial lift methods; constructing tertiary recovery methods; and the water flooding, common production problems, offshore field development and marketing strategies.

## Course Objectives

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

- Apply and gain an up-to-date overview and skills on petroleum engineering practices
- Discuss geophysics and geology
- Explore drilling and analyze rig types
- Employ onshore petroleum engineering and offshore petroleum engineering
- Develop well design and determine the elements of a well program
- Complete technology onshore type wells and offshore drilling
- Operate horizontal wells and multilaterals and production technology
- Recognize special techniques, production systems and flowing wells
- Practice artificial lift methods
- Construct tertiary recovery methods, water flooding, common production problems and offshore field development and marketing strategies

## 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 petroleum engineering for petroleum engineering professionals who have the necessary background and who wish to develop their knowledge in specialist areas. This course will be beneficial to professionals in the earth sciences (geology and or geophysics); professionals in natural sciences and engineering who are likely to be involved in integrated field and reservoir studies, appraisal/development or reservoir management; and to those who want to learn about the current best practice in the oil and gas industry.

## 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 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 Fees

**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.

**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. Steve Ehrenberg, PhD, MSc, BSc, is a Senior Geologist & Reservoir Engineer with 45 years of extensive experience within the Oil & Gas, Petrochemical and Refinery industries. His wide experience covers in the areas of Core & Log Integration, Water Saturation, Coring & Core Analysis, Special Core Analysis, Log Interpretation, Cased-Hole Logging, Core Calibration, Core Analysis, Core-to-Log Data Integration (SCAL), Wireline Logging, Mud Logging, Cased Hole Logging, Production Logging, Well Logging, Reservoir**

**Management, Reservoir Appraisal & Development, Carbonate Reservoir Management, Fractured Reservoirs Evaluation & Management, Naturally Fractured Reservoir, Integrated Carbonate Reservoir Characterization, Geological Modelling, Reservoir Characterization, Geomodelling, Development Geology, Petroleum Geology, Exploration Production, Structural Geology, Wellsite Geology, Analytic Modelling Methods, Sedimentary Geology, Geophysics, Geophysical Exploration, Reservoir Engineering, Reservoir Engineering Applications, Reservoir Engineering & Stimulation, Reservoir Characterization, Clastic Reservoir, Carbonate Reservoir Petrology, Subsurface Facies Analysis, Borehole Images, Geophysical Methods, Oil & Gas Exploration, Marine & Petroleum Geology, Reservoir Performance Using Classical Methods, Fractured Reservoir Evaluation & Management, Reservoir Surveillance & Management, Reservoir Monitoring, , Reservoir Volumetrics, Water Drive Reservoir, Reservoir Evaluation, Well Surveillance, Well Testing, Well Testing & Oil Well Performance, Well Log Interpretation (WLI), Rock Physics & Seismic Data, Formation Evaluation, Well Testing & Data Interpretation, Pore Pressure Prediction and Oil & Gas Reserves Estimations, Well Workover Supervision, Description and Prediction of Reservoir Quality, Sequence Stratigraphy of Carbonate Systems and Introductory Geology.**

During his career life, Dr. Ehrenberg held significant positions and dedication as **Consultant, Professor, Senior Reservoir Geologist, Senior Geologist, Research Geologist, Associate Professor, Assistant Professor and Senior Instructor/Trainer** from various international companies and universities such as the Badley Ashton & Associates Ltd., Khalifa University of Science and Technology, Sultan Qaboos University, PanTerra Geoconsultants B.V, UAE University, Statoil, Stavanger, Shell Development Company and Northern Illinois University.

Dr. Ehrenberg has a **PhD, Master's and Bachelor's** degree in **Geology** from the **University of California, USA and Occidental College, USA**, respectively. Further, he is a **Certified Trainer/Assessor/Internal Verifier** by the **Institute of Leadership & Management (ILM)**, a **Certified Instructor/Trainer** and has delivered numerous trainings, workshops, courses, seminars and conferences internationally.

### Accommodation

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

### 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	<i>Registration &amp; Coffee</i>
0800 – 0815	<i>Welcome &amp; Introduction</i>
0815 – 0830	<b>PRE-TEST</b>
0830 – 0845	<b><i>Geophysics and Geology</i></b>
0845 – 0915	<b><i>Exploration Drilling</i></b>
0915 – 0945	<i>Break</i>
0945 – 1140	<b><i>Rig Types</i></b>
1140 – 1225	<i>Break</i>
1225 – 1420	<b><i>Onshore Petroleum Engineering</i></b>
1550 – 1600	<b>Recap</b>
1430	<i>Lunch &amp; End of Day One</i>

#### **Day 2**

0730 – 0830	<b><i>Offshore Petroleum Engineering</i></b>
0830 – 0915	<b><i>Well Design</i></b>
0915 – 0930	<i>Break</i>
0930 – 1145	<b><i>Elements of a Well Program</i></b>
1145 – 1200	<i>Break</i>
1300 – 1420	<b><i>Completion Technology Onshore Type Wells</i></b>
1420 – 1430	<b>Recap</b>
1430	<i>Lunch &amp; End of Day Two</i>

#### **Day 3**

0730 - 0800	<b><i>Offshore Drilling &amp; Completion</i></b>
0800 – 0915	<b><i>Horizontal Wells &amp; Multilaterals</i></b>
0915 – 0930	<i>Break</i>
0930 – 1030	<b><i>Production Technology</i></b>
1145 – 1200	<i>Break</i>
1200 – 1420	<b><i>Completions</i></b>
1420 – 1430	<b>Recap</b>
1430	<i>Lunch &amp; End of Day Three</i>

#### **Day 4**

0730 - 0845	<b><i>Special Techniques</i></b>
0845 – 0915	<b><i>Production Systems</i></b>
0915 – 0930	<i>Break</i>
0930 – 1145	<b><i>Flowing Wells</i></b>
1145 – 1200	<i>Break</i>
1300 – 1420	<b><i>Artificial Lift Methods</i></b>
1420 – 1430	<b>Recap</b>
1430	<i>Lunch &amp; End of Day Four</i>

**Day 5**

0730 – 0915	<i>Tertiary Recovery Methods</i>
0915 – 0930	<i>Break</i>
0930 – 1030	<i>Water Flooding</i>
1030 – 1215	<i>Common Production Problems</i>
1215 – 1230	<i>Break</i>
1230 – 1345	<i>Offshore Field Development &amp; Marketing Strategies</i>
1345 – 1400	<i>Course Conclusion</i>
1400 – 1415	<i>POST-TEST</i>
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**

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