

# COURSE OVERVIEW DE0290-4D Introduction to Petroleum Engineering

#### **Course Title**

Introduction to Petroleum Engineering

#### **Course Date/Venue**

Session 1: August 12-15, 2024/Club B Meeting Room, Ramada Plaza by Wyndham Istanbul City Center, Istanbul, Turkey

Session 2: October 14-17, 2024/Al Aziziya Hall, The Proud Hotel Al Khobar, Al Khobar, KSA

erence (24 PDHs)

Course Reference DE0290-4D

**Course Duration/Credits** 

Four days/2.4 CEUs/24 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

#### 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 Fee**

Istanbul	US\$ 7,250 per Delegate. This rate includes Participants Pack
	(Folder, Manual, Hand-outs, etc.), buffet lunch, coffee/tea on arrival,
	morning & afternoon of each day.
Al Khobar	US\$ 6,750 per Delegate + VAT. This rate includes H-STK® (Haward
	Smart Training Kit), buffet lunch, coffee/tea on arrival, morning &
	afternoon of each day.



















#### **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**

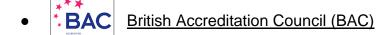
Certificates are accredited by the following international accreditation organizations: -

• 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 gualified 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.



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.

#### **Accommodation**

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



















#### **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, is a Senior Petroleum Engineer with over 30 years of international experience within the onshore and offshore oil & gas industry. His wide experience covers Decision Analytic Modelling Methods for Economic Evaluation, Probabilistic Risk Analysis (Monte Carlo Simulator) Risk Analysis Foundations, Global Oil Demand, in Electrical Submersible Pumps Application, ESP Assembly & Disassembly Techniques, ESP Modeling & Design, ESP Construction & Operational Monitoring, ESP Troubleshooting & Maintenance, Crude Oil Market, Global Oil Reserves, Oil Supply & Demand, Governmental Legislation, Contractual Agreements, Financial Modeling, Oil Contracts, Project Risk Analysis, Feasibility

Analysis Techniques, Capital Operational Costs, Oil & Gas Exploration Methods, Reservoir Evaluation, Extraction of Oil & Gas, Crude Oil Types & Specifications, Sulphur, Sour Natural Gas, Natural Gas Sweeting, Petroleum Production, Field Layout, Production Techniques & Control, Surface Production Operations, Oil Processing, Oil Transportation-Methods, Flow metering & Custody Transfer and Oil Refinery. Further, he is also well-versed in Enhanced Oil Recovery (EOR), Electrical Submersible Pumps (ESP), Oil Industries Orientation, Geophysics, Cased Hole Formation Evaluation, Cased Hole Applications, Cased Hole Logs, Production Operations, Production Management, Perforating Methods & Design, Perforating Operations, Fishing Operations, Well & Reservoir Testing, Reservoir Stimulation, Hydraulic Fracturing, Carbonate Acidizing, Sandstone Acidizing, Drilling Fluids Technology, Drilling Operations, Directional Drilling, Artificial Lift, Gas Lift Design, Gas Lift Operations, Petroleum Business, Petroleum Economics, Field Development Planning, Gas Lift Valve Changing & Installation, Well Completion Design & Operation, Well Surveillance, Well Testing, Well Stimulation & Control and Workover Planning, Completions & Workover, Rig Sizing, Hole Cleaning & Logging, Well Completion, Servicing and 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, Slickline, Wireline & Coil Tubing, Pipeline Pigging, Corrosion Monitoring, Cathodic Protection as well as Root Cause Analysis (RCA), Root Cause Failure Analysis (RCFA), Gas Conditioning & Process Technology, Production Safety and Delusion of Asphalt. 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 in 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 and Drilling & Workover Engineer, Operations Consultant, 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

Registration & Coffee
Welcome & Introduction
PRE-TEST
Geophysics & Geology
Break
Exploration Drilling
Rig Types
Break
Onshore Petroleum Engineering
Offshore Petroleum Engineering
Recap
Lunch & End of Day One

#### Day 2

0730 - 0930	Well Design
0930 - 0945	Break
0945 - 1100	Elements of a Well Program
1100 - 1230	Completion Technology Onshore Type Wells
1230 - 1245	Break
1245 - 1330	Offshore Drilling & Completion
1330 - 1420	Horizontal Wells & Multilaterals
1420 - 1430	Recap
1430	Lunch & End of Day Two

#### Day 3

0730 - 0930	Production Technology
0930 - 0945	Break
0945 - 1100	Completions
1100 - 1230	Special Techniques
1230 - 1245	Break
1245 - 1330	Production Systems
1330 - 1420	Flowing Wells
1420 - 1430	Recap
1430	Lunch & End of Day Three

#### Day 4

0730 - 0930	Artificial Lift Methods
0930 - 0945	Break
0945 - 1100	Tertiary Recovery Methods
1100 - 1230	Water Flooding
1230 – 1245	Break



















1245 - 1330	Common Production Problems
1330 - 1345	Offshore Field Development & Marketing Strategies
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: -



<u>Course Coordinator</u>
Mari Nakintu, Tel: +971 2 30 91 714, Email: <u>mari1@haward.org</u>









