COURSE OVERVIEW DE0246(DP1)

Production Technology & Engineering

Well Completion, Reservoir & Tubing Performance, Artificial Lift, Well Stimulation & Production Logging

Course Title

Production Technology & Engineering: Well Completion, Reservoir & Tubing Performance, Artificial Lift, Well Stimulation & Production Logging

Course Date/Venue

Please refer to page 4

Course Reference

DE0246(DP1)

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 will provide the participants a general understanding of the role of production technology and engineering in multi-disciplines. It introduces a broad array of important daily production technology practices to team members. Terminologies, expressions and basic calculations regularly utilized by production technicians will be covered during the course.

Further, the course will also discuss the conventional completions; the advanced well completions; the artificial lift; perforating; the production logging for monitoring and detection of problems; the causes, identification, drilling period, W.O. period and production period of formation damage; the matrix acidizing and formation damage removal; the reasons for skin damage; the best method for removal; the criteria for acid mixture; the lab testing prior to mixing and pumping; the hydraulic fracturing; the sand control; the isolation of wet zones; and the reasons for W.O. methods and economics.

Course Objectives

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

- Apply and gain an in-depth knowledge on well completion, reservoir and tubing performance, artificial lift, well stimulation and production logging
- Discuss the conventional completions covering wellbore completion concepts, completion criteria, multiple zone completion, advantages and disadvantages, completion equipment, packers and types, nipples, SSD's, SPM's and tubing selection to fulfill the production demands
- Explain advanced well completions including dual and multi string completion and segregation of production zones as well as reservoir and tubing performance including inflow and tubing performance, flow through chokes, completion and optimization of production
- Select and design artificial lift comprising of ESPs, gas lift, PCPs, beam pumps and hydraulic pumps including the applicable methods, description and restrictions in the area
- Identify perforating as well as guns, types of maximum penetration and selection criteria
- Carryout production logging for monitoring and detection of problem as well as present and select criteria to achieve the well's demand
- Determine the causes, identification, drilling period, W.O. period and production period of formation damage
- Illustrate matrix acidizing and formation damage removal as well as detect reasons for skin damage, select the best method for removal, identify criteria for acid mixture and apply lab testing prior to mixing and pumping
- Recognize hydraulic fracturing covering its concepts, programs, applications, testing prior to execution and preparations for fracturing
- Employ sand control by identifying the causes, treatments and installation of sand screens with completion
- Describe isolation of wet zones and discuss the reasons for W.O. methods and economics

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 well completion, reservoir and tubing performance, artificial lift, well stimulation and production logging for trainee production engineers, petroleum engineers and specialist service company engineers.

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.

Accommodation

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

Course Date/Venue

Session(s)	Date	Venue
1	April 12-16, 2026	Pierre Lotti Meeting Room, Movenpick Hotel Istanbul Golden Horn, Istanbul, Turkey
2	July 27-31, 2026	Ruben Boardroom, The Rubens at The Palace, Buckingham Palace Road, London, United Kingdom
3	August 09-13, 2026	Meeting Plus 9, City Centre Rotana, Doha, Qatar
4	September 20-24, 2026	Meeting Room 4, Four Seasons Hotel Cairo at Nile Plaza, Corniche El Nil, Garden City, Cairo, Egypt
5	October 12-16, 2026	Salon Expo, NH Hotel Plaza de Armas, Seville, Spain
6	December 13-17, 2026	Tamra Meeting Room, Al Bandar Rotana Creek, Dubai, UAE
7	January 03-07, 2027	Meeting Plus 9, City Centre Rotana, Doha, Qatar
8	February 07-11, 2027	Tamra Meeting Room, Al Bandar Rotana Creek, Dubai, UAE

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$ 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.
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.
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.
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.
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.
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.

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. Konstantin Zorbalas, MSc, BSc, is a **Senior Petroleum Engineer & Well Completions Specialist** with over **25 years** of **offshore** and **onshore** experience in the **Oil** & **Gas**, **Refinery** & **Petrochemical** industries. His wide expertise includes **Workovers & Completions**, **Petroleum Risk & Decision Analysis**, **Acidizing Application** in **Sandstone** & **Carbonate**, **Well Testing Analysis**, **Stimulation Operations**, **Reserves Evaluation**, **Reservoir Fluid Properties**, **Reservoir Engineering & Simulation Studies**, **Reservoir Monitoring**, **Artificial Lift Design**, **Gas Operations**, **Workover/Remedial Operations** & **Heavy Oil Technology**, **Applied Water Technology**, **Oil & Gas Production**, **X-mas Tree** & **Wellhead Operations** & **Testing**, **Artificial Lift Systems** (**Gas Lift**, **ESP**, and **Rod Pumping**), **Well Cementing**, **Production Optimization**, **Well Completion Design**, **Sand Control**, **PLT Correlation**, **Slickline Operations**, **Acid Stimulation**, **Well testing**, **Production Logging**, **Project Evaluation** & **Economic Analysis**. Further, he is actively involved in **Project Management** with special emphasis in production technology and field optimization, performing conceptual studies, economic analysis with risk assessment and field development planning. He is currently the **Senior Petroleum Engineer & Consultant** of **National Oil Company** wherein he is involved in the mega-mature fields in the Arabian Gulf, predominantly carbonate reservoirs; designing the acid stimulation treatments with post-drilling rigless operations; utilizing CT with tractors and DTS systems; and he is responsible for gas production and preparing for reservoir engineering and simulation studies, well testing activities, field and reservoir monitoring, production logging and optimization and well completion design.

During his career life, Mr. Zorbalas worked as a **Senior Production Engineer**, **Well Completion Specialist**, **Production Manager**, **Project Manager**, **Technical Manager**, **Technical Supervisor** & **Contracts Manager**, **Production Engineer**, **Production Supervisor**, **Production Technologist**, **Technical Specialist**, **Business Development Analyst**, **Field Production Engineer** and **Field Engineer**. He worked for many **world-class oil/gas companies** such as **ZADCO**, **ADMA-OPCO**, **Oilfield International Ltd**, **Burlington Resources** (later acquired by **Conoco Phillips**), **MOBIL E&P**, **Saudi Aramco**, **Pluspetrol E&P SA**, **Wintershall**, **Taylor Energy**, **Schlumberger**, **Rowan Drilling** and **Yukos EP** where he was in-charge of the **design and technical analysis** of a gas plant with capacity **1.8 billion m3/yr gas**. His achievements include **boosting oil production 17.2% per year** since 1999 using **ESP** and **Gas Lift systems**.

Mr. Zorbalas has **Master** and **Bachelor** degrees in **Petroleum Engineering** from the **Mississippi State University**, **USA**. Further, he is an **SPE Certified Petroleum Engineer**, **Certified Instructor/Trainer**, a **Certified Internal Verifier/Assessor/Trainer** by the **Institute of Leadership & Management** (**ILM**), an active member of the Society of Petroleum Engineers (**SPE**) and has numerous scientific and technical publications and delivered innumerable training courses, seminars and workshops worldwide.

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 – 0930	***Conventional Completions*** *Wellbore Completion Concepts • Completion Criteria • Multiple Zone Completion • Advantages & Disadvantages*
0930 – 0945	*Break*
0945 – 1100	***Conventional Completions (cont'd)*** *Completion Equipment • Packers & Types • Nipples, SSD's, SPM's & Tubing Selection to Fulfill the Production Demands*
1100 – 1230	***Advanced Well Completions*** *Dual Completion • Multi String Completion*
1230 – 1245	*Break*
1245 – 1420	***Advanced Well Completions (cont'd)*** *Segregation of Production Zones*
1420 – 1430	***Recap***
1430	*Lunch & End of Day One*

Day 2

0730 – 0930	***Reservoir & Tubing Performance*** *Inflow Performance • Tubing Performance • Flow Through Chokes*
0930 – 0945	*Break*
0945 – 1045	***Reservoir & Tubing Performance (cont'd)*** *Completion • Optimization of Production*
1045 – 1230	***Selection & Design of Artificial Lift*** *Applicable Methods in Area • ESPs • Gas Lift • PCPs*
1230 – 1245	*Break*
1245 – 1420	***Selection & Design of Artificial Lift (cont'd)*** *Beam Pumps • Hydraulic Pumps • Description & Restrictions for Application in the Area*
1420 – 1430	***Recap***
1430	*Lunch & End of Day Two*

Day 3

0730 – 0930	***Perforating*** *Guns • Types Maximum Penetration*
0930 – 0945	*Break*
0945 – 1045	***Perforating (cont'd)*** *Selection Criteria*
1045 – 1230	***Production Logging for Monitoring and Detection of Problem*** *Short Presentation & Selection Criteria to Achieve the Well's Demands*
1230 – 1245	*Break*
1245 – 1420	***Production Logging for Monitoring and Detection of Problem (cont'd)*** *Short Presentation & Selection Criteria to Achieve the Well's Demands (cont'd)*
1420 – 1430	***Recap***
1430	*Lunch & End of Day Three*

Day 4

0730 – 0930	***Formation Damage*** *Causes & Identification • Drilling Period*
0930 – 0945	*Break*
0945 – 1100	***Formation Damage (cont'd)*** *W.O Period • Production Period*
1100 – 1230	***Matrix Acidizing*** *Formation Damage Removal • Detect Reasons for Skin Damage • Select the Best Method for Removal*
1230 – 1245	*Break*
1245 – 1420	***Matrix Acidizing (cont'd)*** *Criteria for Acid Mixture • Lab Testing Prior Mixing & Pumping*
1420 – 1430	***Recap***
1430	*Lunch & End of Day Four*

Day 5

0730 – 0930	***Hydraulic Fracturing*** *Concept, Programs & Applications • Testing Prior Execution of Fracturing*
0930 – 0945	*Break*
0945 – 1100	***Hydraulic Fracturing (cont'd)*** *Preparations for Fracturing*
1100 – 1230	***Sand Control*** *Causes, Treatments & Installation of Sand Screens with Completion*
1230 – 1245	*Break*
1245 – 1345	***Isolation of Wet Zones*** *Reasons for W.O. Methods & Economics*
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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