COURSE OVERVIEW DE0960
Well Composite, Construction Integrity & Completion

Course Title
Well Composite, Construction Integrity & Completion

Course Date/Venue
Please see page 3

Course Reference
DE0960

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 provides an overview of well integrity practices in the petroleum industry. It also analyzes the successes and failures of well integrity management from a series of real case studies in the oilfield and production facilities around the globe.

During the course, the participants will review and discuss the requirements of operators and regulatory authorities for integrity assurance in wells and production facilities. They will also gain knowledge in the completion techniques and design of wells in increasingly complex field developments to ensure well integrity and failure-free, long-life production.

At the end of the course, participants will go through a real case exercise where they will use “hands-on” methods to analyze a well integrity situation and evaluate its economic viability.

Course Objectives

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

- Increase the life and value of old wells with new and proven technology
- Ensure accurate data collection for reliable well completions and future well integrity
- Restore high productivity level of wells with innovative intervention techniques
- Ensure safe-fail health checks for long well integrity
- Define well barriers including the various types, well barrier design, selection and construction principles and high risk well
- Specify components and equipment needed for well integrity
- Identify best practices available to extend the life of equipment and production facilities including the operations integrity management and the well intervention procedures
- Apply basic design and analysis concepts for well integrity
- Design production systems which allow for gassy production, production with sand or solids, viscous production, and for other harsh environments
- Compare production systems to determine which system is most economically feasible using economic analysis

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 composite, construction integrity and completion for field production operations managers, engineers, field supervisors and other technical staff who are involved in the design, installation, evaluation, completion of wells and production systems. Further, the course is suitable for petroleum, drilling, process and reservoir engineers and supervisors.

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	May 11-15, 2025	Meeting Plus 9, City Centre Rotana, Doha Qatar
2	July 13-17, 2025	Boardroom 1, Elite Byblos Hotel Al Barsha, Sheikh Zayed Road, Dubai, UAE
3	August 31-September 04, 2025	Al Buraimi Meeting Room, Sheraton Oman Hotel, Muscat, Oman
4	October 05-09, 2025	Meeting Plus 9, City Centre Rotana, Doha Qatar
5	January 11-15, 2026	Safir Meeting Room, Divan Istanbul, Turkey
6	February 01-05, 2026	Olivine Meeting Room, Fairmont Nile City, Cairo, Egypt

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

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.
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.
Muscat	**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.
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.
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.

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: -

- 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.

- 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. 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	***Integrity for Wells and Production Facilities - Introduction***
0930 – 0945	*Break*
0945 – 1100	***Concepts of Well Integrity and Design***
1100 – 1230	***Well Integrity Management – Leak Detection Techniques*** *High Frequency Ultrasound Tool ● Decision Analysis Example for Leak Repair in the Tubing String*
1230 – 1245	*Break*
1245 – 1420	***Well Integrity Management – Leak Repairing Techniques (cont'd)*** *Chemicals ● Straddle Packers with or without Expansion ● Patches*
1420 – 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day One*

Day 2

0730 – 0930	***Well Barriers*** *Definitions ● Types ● Well Barrier Design ● Selection and Construction Principles ● High Risk Wells*
0930 – 0945	*Break*
0945 – 1100	***Flow Assurance Concerns and How They are Related to Loss of Production and Integrity*** *Hydrates, Wax, Asphaltenes, Scale, Emulsions ● Erosion and Corrosion*
1100 – 1230	***Operations Integrity Management*** *Project Management ● Proper Planning ● Resource Allocation ● Performance Monitoring, Report and Review ● Management of Change*
1230 – 1245	*Break*
1245 – 1420	***Well Integrity in Well Intervention Procedures - Case history of Rig-up During Acid Job – Gas Injection*** *Well Services Operating Procedures ● Reporting Procedures ● Record Keeping ● Pressure Control Equipments Standers ● Contingency Plan*
1420 - 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day Two*

Day 3

0730 – 0930	***Improvement of Integrity Strategies Utilizing Imaging Technology*** *Examples of Downhole Imaging to Formulate Well Integrity Strategies ● Combination of Caliper and Video Imaging ● Magnetic Wall Thickness Tool*
0930 – 0945	*Break*
0945 – 1100	***Maximizing the Value of Old Wells in Mature Fields Utilizing Proper Well Integrity Techniques*** *A Big Majority of Old Wells are Considered "Sick" Wells Due to Well Integrity Concerns. This is the Case of Many Mature Fields in the Middle East, which Suffer from Integrity Issues. Techniques and Methodologies are Explained to Maximize the Value of Mature Fields Enforcing Proper Integrity Management*
1100 – 1230	***Well Integrity in Multi-Lateral Wells – A Challenge in Today's Petroleum Industry*** *Short Introduction to Multi-Lateral Wells ● Water Influx in Dual Lateral Wells and Well Integrity Implications*
1230 – 1245	*Break*
1245 – 1420	***Selecting Proper Sand Control Techniques to Achieve Well Integrity Downhole and at Surface***
1420 – 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day Three*

Day 4

0730 – 0930	***Group Exercise – Christmas Tree Integrity*** *A Real Case Example of Christmas Tree Integrity is Discussed in the Course and the Participants are Asked to Prepare their Own Solution*
0930 – 0945	*Break*
0945 – 1100	***Group Exercise – Christmas Tree Integrity (cont'd)*** *Each Participant Presents His/Her Solution of Christmas Tree Integrity in the Course and All Possible Solutions are Analyzed to Reach the Best Solution Agreed by All Participants*
1100 – 1230	***Principles of Economic Analysis*** *Introduction of Methods to Perform Economic Analysis of Projects ● Detailed Study of Discounted Cash Flow Models (DCF) ● Examples Utilizing DCF Analysis to Evaluate Projects*
1230 – 1245	*Break*
1245 – 1420	***Evaluation of Projects in the Oil Industry*** *Example Calculations and Evaluation of a Real Case Oilfield Development Scenario ● Analysis of Results and Decision Making Processes ● Data Interpretation, Control and Optimization Methods in Evaluation of Petroleum Projects*
1420 – 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day Four*

Day 5

0730 – 0930	***Group Exercise – Economic Evaluation of Well Operations*** *Perform an Exercise of a Complete Project Evaluation Utilizing Field Data for Well Operations*
0930 – 0945	*Break*
0945 – 1100	***Group Exercise – Economic Evaluation of Well Operations (cont'd)*** *Presentation of Results from Course Participants*
1100 – 1230	***Group Exercise – Economic Evaluation of Well Operations (cont'd)*** *Analysis of Results*
1230 – 1245	*Break*
1245 – 1345	***Interactive Roundtable Discussions of Well Completions and Closing Remarks in Well Integrity Issues***
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

Reem Dergham, Tel: +974 4423 1327, Email: reem@haward.org