

# COURSE OVERVIEW DE0485 Well Integrity, Well Services & Well Workover

# Course Title

Well Integrity, Well Services & Well Workover

# **Course Date/Venue**

August 25-29, 2024/Oryx Meeting Room, Doubletree by Hilton Doha-Al Sadd, Doha, Qatar

CEUS

(30 PDHs)

Course Reference DE0485

Course Duration/Credits Five days/3.0 CEUs/30 PDHs

#### Course Description









This practical and highly-interactive course includes real-life case studies 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 Well Integrity, Well Services and Well Workover. It covers the importance of well integrity in pipeline operations; the fundamentals and kev components of well integrity; the key standards and guidelines for (API and ISO) including the well integrity management systems (WIMS); the types, functions and importance of well barriers; the well integrity monitoring and assessment; the well services and their significance including well servicing equipment and tools; the wireline and slickline operations and coiled tubing services; and the hydraulic fracturing, well stimulation techniques, well service safety practices and risk assessment and mitigation.

Further, the course will also discuss the different types of workover rigs and the criteria for selecting the appropriate rig; the workover operations planning, well killing procedures, fishing operations and well re-completion techniques; the advanced well integrity monitoring; the common well integrity issues; the proper troubleshooting and problem-solving techniques; the causes of corrosion and erosion; ensuring integrity of casing and tubing; and the techniques for detecting leaks and methods for controlling and mitigating leaks.



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During this interactive course, participants will learn the well services for optimal performance; coordinating and planning well services for integrated services; the workover and well intervention technologies; the cost optimization in well services and workover; the compliance with environmental regulations and implementing sustainable practices in well services and workover; preparing emergencies in well operations; and developing and implementing contingency plans.

# Course Objectives

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

- Apply and gain an in-depth knowledge on well integrity, well services and well workover
- Discuss the importance of well integrity in pipeline operations and the fundamentals and key components of well integrity
- Explain the key standards and guidelines for (API and ISO) including the well integrity management systems (WIMS)
- Recognize the types, functions and importance of well barriers and apply well integrity monitoring and assessment
- Discuss well services and their significance including well servicing equipment and tools
- Apply wireline and slickline operations, coiled tubing services, hydraulic fracturing, well stimulation techniques, well service safety practices and risk assessment and mitigation
- Discuss well workover and identify the different types of workover rigs and the criteria for selecting the appropriate rig
- Implement workover operations planning, well killing procedures, fishing operations and well re-completion techniques
- Carryout advanced well integrity monitoring, identify the common well integrity issues and apply proper troubleshooting and problem-solving techniques
- Identify the causes of corrosion and erosion as well as ensure integrity of casing and tubing
- Employ techniques for detecting leaks and methods for controlling and mitigating leaks
- Combine well services for optimal performance and coordinate and plan well services for integrated services
- Explain workover and well intervention technologies and apply cost optimization in well services and workover
- Ensure compliance with environmental regulations and implement sustainable practices in well services and workover
- Prepare for emergencies in well operations as well as develop and implement contingency plans



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# Exclusive Smart Training Kit - H-STK®



Participants of this course will receive the exclusive "Haward Smart Training Kit" (**H-STK**<sup>®</sup>). The **H-STK**<sup>®</sup> 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 integrity, well services and well workover for well service engineers, drilling contractors, drilling operations senior engineers, section leaders, drilling engineering supervisors, well engineers and other technical staff.

#### Training Methodology

All our Courses are including Hands-on Practical Sessions using equipment, Stateof-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% Lectures20% Practical Workshops & Work Presentations30% Hands-on Practical Exercises & Case Studies20% 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

**US\$ 8,500** per Delegate. This rate includes H-STK<sup>®</sup> (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.



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# 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: -

• ACCREDITED

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.

• \*\*\* \* BAC

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.



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#### 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, Electrical Submersible Pumps Application, ESP Assembly & Disassembly Techniques, ESP Modeling & Design, ESP Construction & Operational Monitoring, ESP

Troubleshooting & Maintenance, 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.



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# Course Program

The following program is planned for this course. However, the course instructor(s) may modify this program before or during the workshop for technical reasons with no prior notice to participants. Nevertheless, the course objectives will always be met:

Day 1:	Sunday, 25 <sup>th</sup> of August 2024
0730 – 0800	Registration & Coffee
0800 - 0815	Welcome & Introduction
0815 - 0830	PRE-TEST
	Introduction to Well Integrity
0830 - 0930	<i>Overview of Course Objectives &amp; Agenda</i> • <i>Importance of Well Integrity in Pipeline Operations</i>
0930 - 0945	Break
0945 - 1030	<i>Fundamentals of Well Integrity</i> Definition & Principles • Key Components of Well Integrity
1030 - 1130	<b>Regulations &amp; Standards</b> Overview of International & Local Regulations • Key Standards & Guidelines (API, ISO)
1130 - 1215	Well Integrity Management SystemsIntroduction to Well Integrity Management Systems (WIMS) • Components ofa Robust WIMS
1215 - 1230	Break
1230 - 1330	<i>Well Barrier Elements</i> <i>Types of Well Barriers (Primary &amp; Secondary)</i> • <i>Functions &amp; Importance of</i> <i>Well Barriers</i>
1220 1420	Well Integrity Monitoring & Assessment
1330 – 1420	Techniques for Monitoring Well Integrity • Regular Assessment Procedures & Tools
1420 - 1430	Recap
1430	Lunch & End of Day One

Day 2:	Monday, 26 <sup>th</sup> of August 2024
	Well Services
0730 - 0830	Overview of Well Services & their Significance • Types of Well Services
	(Maintenance, Enhancement)
0830 - 0930	Well Servicing Equipment & Tools
	Common Equipment Used in Well Services • Proper Usage & Maintenance of
	Tools
0930 - 0945	Break
0945 - 1100	Wireline & Slickline Operations
	Differences Between Wireline & Slickline • Applications & Procedures for Each
1100 1015	Coiled Tubing Services
1100 – 1215	Introduction to Coiled Tubing • Advantages & Applications
1215 – 1230	Break
1230 - 1330	Hydraulic Fracturing & Stimulation
	Fundamentals of Hydraulic Fracturing • Techniques for Well Stimulation
1330 - 1420	Well Service Safety Practices
	Safety Protocols in Well Services • Risk Assessment & Mitigation
1420 - 1430	Recap
1430	Lunch & End of Day Two



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Day 3:	Tuesday, 27 <sup>th</sup> of August 2024
0730 - 0830	Well Workover
0750 - 0850	Definition & Purpose of Well Workover • When & why to Perform a Workover
0830 - 0930	Workover Rig Types & Selection
	Different Types of Workover Rigs • Criteria for Selecting the Appropriate Rig
0930 - 0945	Break
0945 – 1100	Workover Operations Planning
	Steps in Planning a Workover Operation • Key Considerations & Challenges
1100 - 1215	Well Killing Procedures
	Techniques for Well Killing • Safety Measures During Well Killing
1215 – 1230	Break
1000 1000	Fishing Operations
1230 – 1330	Common Fishing Tools & Techniques • Strategies for Successful Fishing
	Operations
1330 - 1420	Well Re-Completion Techniques
1420 - 1430	Methods for Well Re-Completion • Benefits & Potential Challenges
	Recap
1430	Lunch & End of Day Three
<u>Day 4:</u>	Wednesday, 28 <sup>th</sup> of August 2024
	Advanced Well Integrity Monitoring
0730 - 0830	Latest Technologies in Well Integrity Monitoring • Data Analysis &
	Interpretation
	Integrity Issues & Problem Solving
0830 - 0930	Common Well Integrity Issues • Troubleshooting & Problem-Solving
	Techniques
0930 - 0945	Break
0945 - 1100	Corrosion & Erosion Management
	Causes of Corrosion & Erosion • Prevention & Control Strategies
1100 - 1215	Casing & Tubing Integrity
	Ensuring Integrity of Casing & Tubing • Inspection & Maintenance Practices
1215 - 1230	Break
1230 - 1330	Leak Detection & Control
	<i>Techniques for Detecting Leaks</i> • <i>Methods for Controlling &amp; Mitigating Leaks</i>
1220 1420	Case Studies & Best Practices Parison of Page World Case Studies • Disquestion of Page Durations in Well
1330 – 1420	Review of Real-World Case Studies • Discussion of Best Practices in Well
1420 - 1430	Integrity Recap
1420 - 1430	Lunch & End of Day Four
1450	Lunch O Eliu of Duy I our
Day 5:	Thursday, 29 <sup>th</sup> of August 2024
	Integrated Well Services Strategies
0730 – 0830	Combining Well Services for Optimal Performance • Coordination & Planning
	for Integrated Services
0830 - 0930	Workover & Well Intervention Technologies
0020 0045	Latest Technologies in Workover & Intervention • Application & Benefits
0930 - 0945	Break
0945 - 1100	Cost Optimization in Well Services & Workover Strategies for Cost Effective Operations • Palancing Cost with Safety &
0945 - 1100	Strategies for Cost-Effective Operations • Balancing Cost with Safety & Efficiency
	Efficiency Environmental & Regulatory Compliance
1100 – 1230	Ensuring Compliance with Environmental Regulations • Sustainable Practices
1100 - 1230	in Well Services & Workover
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1230 - 1245	Break
	Emergency Response & Contingency Planning
1245 - 1345	Preparing for Emergencies in Well Operations • Developing & Implementing
	Contingency Plans
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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