



*Training Course:  
BHA Design and Best Drilling Practices*

*6 - 10 October 2024*

*Cairo (Egypt)*

*Holiday Inn & Suites Cairo Maadi, an IHG Hotel*

## Training Course: BHA Design and Best Drilling Practices

Training Course code: EN234973 From: 6 - 10 October 2024 Venue: Cairo (Egypt) - Holiday Inn & Suites Cairo Maadi, an IHG Hotel Training Course Fees: 3900 € Euro

### Introduction

In order to drill a well successfully, today's drilling personnel must be proficient in all necessary disciplines. Whether you want to drill a well, whether it's a shallow well or a sophisticated, high pressure well, this advanced drilling best practices online training session will provide you all the essentials you need.

Engineers and field staff involved in the design and execution of drilling programs are also targeted by this training session. This discusses every facet of drilling technology while placing equal emphasis on theory and application.

Advanced Mud Logging operations and principles will also be covered in the Advanced Drilling Best Practices online training program.

### Objectives:

- Cost-effectively drill a well while maximizing penetration rate Assessing stopped pipe issues and enhancing hole cleaning and ROP will help you avoid future issues.
- Plan, drill string, BOP, wellheads, and Create and put into action bit and hydraulics programs
- BHA design for proper drilling control, including directional and horizontal drilling Use the ideas and methods of mud logging to properly identify and assess well control issues.

### Impact:

- lowering the well's cost and reducing the risk
- Increasing the well's lifespan and managing it
- preserving the integrity of the well

### Target Audience:

- Well site managers
- drilling engineers
- Contractors for Drilling
- drilling managers
- Driller trainees
- A rig engineer

## Outlines:

### Day 1:

- Practical Answers to Drilling Hole Issues
- Hole Issues stuck pipe, lost circulation
- Cleaning a Hole's Effect on Hole Issues
- Sorts of Stuck Pipe
- Proper Drilling Procedures and Preventative Measures Suggestions for Formation and Related Issues
- Effect of Fishing Equipment on Stuck Pipe Loss and Types
- Resources Used to Address the Issues
- Processes and Suggestions
- Losses in the Reservoir and Outside of It
- A Novel Plug Setup Method to Repair Serious Loss
- How Can the Issue Be Fixed?

### Day 2:

- How you can prevent Washouts?

- How do you analyze the true pressure loss of a Washout?
- Bit Selection and Hydraulics Application, including Nozzle Selection
- Bit Types
- Rolling Cutter Bits
- Polycrystalline Diamond Bits
- Standard Classification of Bits
- Preparing the Bit to be run in Hole
- Running in Hole and Drilling-out Cement and Plugs
- Breaking the Bits
- Fundamental Parameters Discussion
- Optimising Drilling Performance
- Drill-off Test
- Drill String Dynamic / Vibration
- Factors related to Bit Run Termination
- Bit Hydraulic
- BHA and Drill String Design, Selection of Casing Seats, BOP Equipment
- Drill Strings
- Functions of Drill Pipe, Drill Collars and BHA Selection
- Grades of Drill Pipe and Strength Properties
- Thread Types and Tool-joints
- Drill Collar Weight and Neutral Point
- Basic Design Calculations based on-depth to be Drilled
- Functions of Stabilizers and Roller Reamers

### Day 3:

- Lifting Capacity of Drilling Fluids, Pressure losses in the Circulating System and ECD

- Functions of the Drilling Fluids, Impact of Hydraulic on the Drilling Optimization
- Parameters affecting on the Drilling Penetrations
- Drilling Fluid Properties, Functions of Drilling Fluid
- Mud Properties and Problems related to Mud Properties
- Seepage Losses Control

#### Day 4:

- Well Control
- Three Phases of Well Control
- Hydro-dynamic Pressure
- Equivalent Circulating Density
- Mud Weight Maintenance
- Second Line of Defense
- Induced Kick
- Kick Detection Team
- Causes of Kicks while Drilling
- Indication of Induced Kicks
- Diverter Guidelines while Drilling
- Best Kill Procedure for Kick Type
- Kick Control Team
- Removing Gas Trapped below the BOP
- Causes of Kicks while Tripping
- Diverter Guidelines while Tripping
- Evaluating the Off Bottom Kick Condition
- Strip and Bleed Guidelines
- Volumetric Guidelines
- Dynamic Lubricates and Bleed Guidelines

- Third Line of Defense Underground Blowout
- Kick Detection in Oil Base Mud
- Operations that can mask a Kick
- Well Control Kill Sheet
- Exercise

Day 5:

- Introduction
- Modern Mud Logging Unit
- Petroleum Engineering Services
- Gas Analysis
- Cutting Evaluation
- Shale Bulk Density
- Shale Factor
- Flow Line Temperature
- Drilling Models
- Petro Physical Measurements
- Drilling Porosity
- Selection a Mud Logging Service
- Drilling problems and How to solve them

## Registration form on the Training Course: BHA Design and Best Drilling Practices

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Complete & Mail or fax to Global Horizon Training Center (GHTC) at the address given below

### Delegate Information

Full Name (Mr / Ms / Dr / Eng): .....

Position: .....

Telephone / Mobile: .....

Personal E-Mail: .....

Official E-Mail: .....

### Company Information

Company Name: .....

Address: .....

City / Country: .....

### Person Responsible for Training and Development

Full Name (Mr / Ms / Dr / Eng): .....

Position: .....

Telephone / Mobile: .....

Personal E-Mail: .....

Official E-Mail: .....

### Payment Method

- Please find enclosed a cheque made payable to Global Horizon
- Please invoice me
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### Easy Ways To Register

Telephone:  
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info@gh4t.com  
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