



# GLOBAL EXPERTS INSTITUTE FOR TRAINING. ISO 9001-2008 TRAINING PROVISION CERTIFIED

# **Advanced Drilling Technology And Equipment**

# **Schedule Dates:**

Start Date	End Date	Place
4 Mar 2024	8 Mar 2024	Malaysia





## **Program Introduction:**

This course provides a comprehensive overview of the principles and practices of advanced drilling engineering, enabling participants to decide which technology is most appropriate for their business.

It is an introduction to advanced drilling topics such as High Pressure High Temperature (HPHT) drilling, modern drilling technologies (i.e. casing drilling, unconventional drilling methods), special well design, drilling problems and their solutions. Advanced drilling techniques such as casing drilling or coiled tubing drilling are also covered as are tools and techniques used in casing or tubing drilling such as surface equipment, bottomhole assemblies (BHA), etc.

#### **Program Objective:**

- ✓ Drill string mechanics: loads, cause of failure, design concepts
- ✓ Mechanized drilling operations: make-up of tubular, mechanized drilling rigs
- ✓ Drilling problems: stuck pipe situations, fishing operations
- ✓ Advanced drilling technologies casing drilling, HPHT, coiled tubing drilling
- ✓ Proper selection of drilling technology for shale gas, geothermal drilling, etc.
- ✓ Non-conventional drilling methods and equipment including environmental aspects of drilling activities
- ✓ Drilling through gas hydrates

#### Who should attend?

➤ A drilling, production or operations engineer, field supervisor, manager or technical support personnel with a good understanding of the principles of drilling engineering





## **Program Outlines**

## Day One

- Drilling engineering a short review
- Drilling methods and drilling technologies
- Drill string mechanics
- Mechanized drilling operations

#### **Day Two**

- Drilling problems and their solutions in modern drilling operations
- Coiled tubing drilling technology
- Casing drilling technology and casing fatigue
- Expandable tubular and their applications

#### Day Three

- Drilling HPHT wells
- Drilling fluids for HPHT environment
- Wellbore hydraulics
- Drill bit optimization and selection
- Non-conventional drilling methods

### **Day Four**

- High performance drilling concepts
- Drilling through gas hydrates
- Drilling Simulators an overview
- Aspects wellbore construction and wellbore integrity





#### **Day Five**

- Drilling vibrations: a practical approach
- Low frequency and high frequency drilling vibrations
- Use of machine learning to understand drilling vibrations
- Stick slip detection and mitigations

#### **Training Methodology:**

- Slide presentations
- Interactive discussion
- Simulations and Gamification
- Online Video material

## **Cost Quotation in Kuwaiti Dinars**

#### The total cost includes:

- Instructor(s) expenses
- Training materials
- Certification
- Lunch Buffett

**Total Cost: 1450 KD per Participant** 

(One Thousand Four Hundred Fifty Kuwaiti Dinar)