



DE352: Advanced Drilling Technologies

Training Description:

This advanced training course provide a comprehensive overview of drilling technologies currently available and covers the essential principles and practices of Drilling Engineering. The training course provides participants with 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.

Throughout the training course, participants will be guided through the planning and evaluation stages of drill string design. They will learn how to perform simple calculations associated with well tubular design. Advanced drilling techniques such as casing drilling or coiled tubing drilling are also covered in the course.

In addition, participants will become confident using the tools and techniques for casing or tubing drilling such as surface equipment, bottom hole assemblies (BHA), etc. At the end of the course, participants will be able to decide which technology is more suitable for their business using decision matrix.

Training Objectives:

By the end of the training, participants will be able to gain an in-depth understanding of:

- ✓ Drill string mechanics: loads, cause of failure, design concepts
- ✓ Mechanised drilling operations: make-up of tubular, mechanised 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

Training Designed for:

This course is intended for Drilling Engineers, Production and operations engineers, Field supervisors, Managers and technical support personnel, Maintenance personnel who are involved in drilling and completion technology.

Training Requirement:

“Hand’s on practical sessions, equipment and software will be applied during the course if required and as per the client’s request.”

Contents can be adapted to your specific wishes. It is therefore possible to focus on specific modules of the training course as per client’s learning needs and objectives. Further, it should be forwarded to us a month prior to the course dates.

Training Program:

FIVE DAYS:

- ❖ What is ERD
- ❖ Definitions and Achievements
- ❖ High Angle Differences
- ❖ Simple well Planning
- ❖ Drilling engineering - a short review
- ❖ Drilling methods and drilling technologies
- ❖ Drillstring mechanics
- ❖ Mechanised drilling operations
- ❖ Drilling problems and their solutions in modern drilling operations
- ❖ Coiled tubing drilling technology
- ❖ Casing drilling technology and casing fatigue
- ❖ Expandable tubular and their applications
- ❖ Drilling HPHT wells
- ❖ Drilling fluids for HPHT environment
- ❖ Wellbore hydraulics
- ❖ Drill bit optimisation and selection
- ❖ Non-conventional drilling methods
- ❖ High performance drilling concepts
- ❖ Drilling through gas hydrates
- ❖ Aspects wellbore construction and wellbore integrity
- ❖ Proper selection of drilling technologies and methods for your business
- ❖ Course Conclusion
- ❖ POST-ASSESSMENT and EVALUATION

Training Methodology:

This interactive training course includes the following training methodologies as a percentage of the total tuition hours:

- 30% Lectures, Concepts, Role Play
- 70% Workshops & Work Presentations, Techniques, Based on Case Studies & Practical Exercises, Gamification, Software & General Discussions
- Pre and Post Test

Training Certificate(s):

CMCT Internationally recognized certificate(s) will be issued to each participant who completed the course.

Training Fees:

TBA as per the course location - This rate includes participant's manual, hand-outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Note: The 5% VAT (Value Added Tax), will be effective starting 01st of January 2018 as per the new regulation from the UAE Government. The VAT applies for all quotation both for local and abroad.

Training Timings:

Daily Timings:

07:45 - 08:00	Morning Coffee / Tea
08:00 - 10:00	First Session
10:00 - 10:20	Recess (Coffee/Tea/Snacks)
10:20 - 12:20	Second Session
12:20 - 13:00	Recess (Prayer Break & Lunch)
13:00 - 14:00	Last Session

For training registrations or in-house enquiries, please contact:

Aisha Relativo - Training & Career Development Manager

aisha@cmc-me.com / training@cmc-me.com

Tel.: +971 2 665 3945 or +971 2 643 6653 | Mob.: +971 52 2954615