

CERTIFIED FLOORMAN COMPETENT PERSON (LAND & OFFSHORE)

Course Duration	Location	Theoretical	Practical
8weeks	NIGERIA & INDIA	40%	60%

OVERVIEW

The course of instruction in Floorman Competent Person / Drillers Helper Training will consist of drilling programs, hands-on rig training, and industry safety programs. Students will be prepared in this course as competent persons for job readiness, it will establish the confidence and professional skills they will need to join the crew immediately after the course.

AIM

This course established to train individuals who are looking to work in the drilling industry.

TARGET AUDIENCE

Floorman Competent Person is open to School Certificate Holders, Fresh graduates who are willing to join the oil drilling industry in a short time. All students must be 18years and above. All students must have a background in Sciences.

An entrance test will be conducted in Nigeria by the human resources department of Bullmate Limited, and successful students will be admitted into the course.

Note: Student's admission into the course depends on the performance during the entrance exam.

Drilling Industry Training (DIT)

At the end of this course, students will be sent to Drilling and Exploration companies in India to work for a one month and gain hands-on-training for competent person certification.

Students will receive certificates from The International Association Drilling Contractors (IADC) USA and The Drilling and Exploration Companies respectively.

OBJECTIVES

Upon completion of this course, all trainees will be able to:

1. Understand the working of a rig, onshore or offshore
2. Understand the basic Skills required for engineers in the field
3. Share the rig people lifestyle while on the rig
4. Have a perfect knowledge of all the technical aspects of a rig, onshore or offshore
5. Understand the duties of a Floorman/ Roughnecks
6. Understand the basics of different drilling operations and aspects including:
 - Stuck Pipe Prevention
 - Drilling String Design & BHA
 - Drilling Bits
 - Rig Components
 - HSE Regulations in the Drilling Industry
 - Well Control
 - Directional & Horizontal Drilling
 - Rig and its maintenance
 - Offshore Technology.

COURSE CONTENTS

Element I: **Introduction to Rotary Drilling**

Lesson1:

- Rotary Drilling
- Petroleum Geology
- Geological Structures
- Application of Geological Concepts
- Petroleum Reservoirs

Lesson2:

- Rotary Drilling Rigs
- Derrick, Mast, and Substructure
- Power and Power Transmission
- Drawworks
- Blocks and Drilling Line
- Rotary, Kelly, and Swivel
- Circulating System
- Blowout Preventers
- Auxiliaries
- Rig Design Considerations

Lesson 3:

- Mud Circulation Equipment
- Mud Pits
- Mud Mixers and Agitators
- Mud Pit Instruments
- Mud Storage and Handling
- Mud Cleaning Equipment
- Duplex Mud Pumps
- Triplex Mud Pumps

Lesson 4:

- The Drill Stem
- Introduction and Early History
- Drill Pipe
- Tool Joints
- Drill Collars
- Drill Stem Auxiliaries
- Operations Involving the Drill Stem

Lesson 5:

- Drilling Bits
- Roller Cone Bits
- Diamond Bits
- Drag Bits

Element II: Routine Drilling Operations

Lesson 1:

- Drilling a Straight Hole
- Hole Angle Change
- Causes of Hole Deviation
- Controlling Hole Deviation
- Bottom hole Assembly Tools
- Straight-Hole Survey Instruments

Lesson 2:

- Rig Hydraulics
- The Hydraulic System
- Pressure Losses in the System
- Bit Hydraulics
- Annular Hydraulics
- Designing the Rig Hydraulics Program

Lesson 3:

- Drilling Muds
- Drilling Mud Composition and Properties
- Functions of Drilling Mud
- Water-base Muds
- Oil Muds
- Field Tests of Drilling Muds

Lesson 4:

- Casing
- Types of Casing
- Casing Standards
- Casing String Design
- Casing Accessories
- Setting Casing

Lesson 5:

- Cementing
- Introduction
- Mixing Cement
- Pumping Cement
- Cement Volume Requirements
- Considerations after Cementing
- Oilwell Cements and Additives
- Secondary Cementing

Element III: **Special Drilling Operations**

Lesson 1:

- Controlled Directional Drilling, Part I
- Introduction
- Directional Wells
- Directional Surveying

Lesson 2:

- Controlled Directional Drilling, Part II
- Changing the Course of the Hole
- Special Problems in Directional Drilling

Lesson 3:

- Open-Hole Fishing
- Introduction
- Causes of Fishing Jobs
- Fishing Equipment and Techniques
- The Economics of Fishing

Lesson 4:

- Well Control, Part Introduction
- Well Pressures
- Causes of Kicks
- Signs of a Kick

Lesson 5:

- Well Control, Part II
- Controlling Kicks
- Preventer Drills

Lesson 6:

- Optimization
- Introduction
- Bits
- Weight on Bit and Rotary Speed
- Drilling Fluids
- Big Hydraulics
- Formation Properties
- Computerized Optimization

Element IV: Offshore Technology

- Buoyancy, Stability and Trim
- Diving and Equipment
- Helicopter Safety
- Jacking Systems and Rig Moving Procedures
- Life Offshore
- Marine Riser Systems and Subsea Blowout Preventers
- Orientation Offshore Crane
- Spread Mooring Systems
- Vessel Inspection and Maintenance
- Wind Waves Weather

Element V: Rig Maintenance

- Blocks & Drilling Line
- Diesel engines
- Drill String & Drill Collars
- Drilling Fluids, Mud Pumps, and Conditioning Equipments
- Rotary Rig Components
- Rotary, Kelly, Swivel, tongs & Top drive
- Safety on the Rig
- The Auxiliaries
- The Bit
- The Drawworks and compounds.

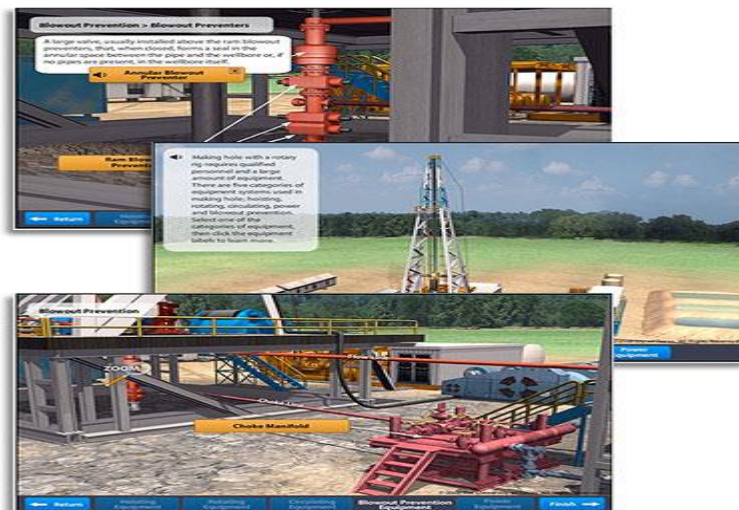
Element VI: **Duties of a Floorman/Roughneck**

- Care and Use of Tongs (DVD)
- Laying Down Pipe (DVD)
- Making A Trip (DVD)
- Making A Connection (DVD)
- Care and Handling of Rotary Slips (DVD)

Element VII: **Training Simulations**

Sim 1: Interactive Drilling Rig

This self-paced training tool brings the drilling rig to life. See and hear about what each component does, where each is located, and zoom in for close-up views. Interactive training such as this is especially useful for oil and gas industry personnel seeking clearer understanding of the mechanical parts of this key component of drilling both on land and offshore.



Sim 2: Well Control

Well control methods are used to control a kick and prevent a well from blowing out. In this module you will have a basic understanding of:

- the goals of well control
- types of well and formation pressures associated with drilling for oil and gas
- the causes and signs of formation fluids entering the well
- well control operations performed by the rig crew members
- some well control methods used when a kick is detected



The Well Control module consists of the following:

- Lesson 1- Well Control Overview
- Lesson 2- Well Control Operations
- Well Control Glossary

Sim 3: Well Planning

The success of a well is often determined by the amount of thought that goes into producing the best possible plan. In this module you will learn:

- What a well plan is and its purpose
- the steps in the well planning
- some elements in the well drilling program
- the people involved in the planning process
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The Well Planning module consists of the following:

Lesson 1- Well Planning Overview

Well planning glossary



Element VIII: IADC WellCAP Well Control Course

This course will be offered in Partnership with Well Control School.

The WellCAP program is based on the principle that proper training, emphasizing the knowledge and practical skills critical to successful well control, produces competent rig crews.

The topics and skills offer the highest level of training, testing, simulation, and overall employee competence to the oil and gas industry. Interactive tasks and role-playing familiarize learners with well control concepts, emphasizing correct procedures and teamwork.



Computer graphics dramatically depict downhole conditions such as deepwater or horizontal drilling. Skill levels are recorded as students complete each module

Contact us for more information, send email to info@bullmate.com or call 07063474496. Visit our website: www.bullmate.com

