

An LDI Training Course

INTRODUCTION TO DRILLING

by

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This Introduction to Drilling course provides participants with basic knowledge of drilling methods and the equipment used to drill a well successfully and safely.

By attending this course, participants will:

Know the types of rocks encountered during drilling

Understand the steps of Well Design and Construction

Learn how drilling rigs work

Know the rig components: the hoist and rotary systems, Mud system, Drill string and Blow Out Preventers

Understand drilling reports and drilling costs

Learn the different types of drilling problems and how to handle them safely

Know the types of wells: vertical, directional and horizontal

This course is perfect for people who have very little knowledge of drilling.

Course Outline

Basic Petroleum Geology

Types of sedimentary rocks

Source Rock and Hydrocarbon generation

Pressure and temperature Gradient

What is a reservoir

Types of Hydrocarbon of interest to the Petroleum Exploration

Well Design and Construction

Tangible Equipment

Christmas Trees

Wellheads

Casing

Tubing

Sub Surface equipment

Introduction Well Design

Pore Pressure Estimation

Casing Design

Drill String Design

Drilling Rigs

Types of Rigs

Land rigs

Jack-up rigs

Semi-Submersible

Drillships

Components of a Rig

Hoist and Rotary System

Mud Circulating and solids control System

Drill string Rotary System

Blow Out Preventers System

Other Equipment

Handling Tools

Cementing Unit

Logging Unit

Drilling Report, Cost and AFE

Drilling Report
Morning Drilling Report
Days vs Depth Curve

Cost and AFE
Daily Drilling Accrual Cost
Planning the AFE

Drilling Safety

OSHA Safety Statistics
Lost Time Incident Rate
Recordable Incidents
Medical Treatment
Near Miss

Drilling Safety Measures
Personal Protective Equipment
Stop Card
Job Safety Analysis
Lock Out Tag-out

Directional Drilling

Directional Equipment
Calculation methods

Who Should Attend

The introduction course is perfect for oilfield personnel and engineers who will involve in drilling.

This course will also benefit personnel who support drilling activities such as:

Accountants and finance people
Human Resources personnel
Safety, Health, and Environment personnel
Government relations and public relations personnel
Logistics and warehouse personnel
Purchasing and contracts personnel

Your Instructor

Dr.-Ing. Bonar Tua Halomoan Marbun is an Associate Professor and Head of the Petroleum Engineering Study Program at Institut Teknologi Bandung.

Dr. Bonar Marbun received a Petroleum Engineering Bachelor Degree in 1999 from Bandung Institute of Technology. In 2006, he received Dr. Ing. Degree from the Clausthal University of Technology in Germany.

Dr. Bonar Marbun is a member of Oil and Gas Independent Team Safety Control of the Ministry of Energy and Mineral Resources of Indonesia.

For more information about the course, please visit lditraining.com or contact LDI Training at [HYPERLINK "mailto:lditrain@indo.net.id" lditrain@indo.net.id](mailto:lditrain@indo.net.id)