

An LDI Training Course

BASIC PETROLEUM ENGINEERING

This course covers the basic concepts and common practices of petroleum engineering related to geology, reservoir engineering, drilling technology, and production methods.

Here are the topics of petroleum engineering that will be covered in this course:

- Petroleum geology
- Oil and gas exploration methods
- Reservoir rock properties
- Hydrocarbon fluid properties
- Types of reservoirs
- Reserves calculation
- Reservoir drive mechanisms
- Drilling rigs and equipment
- Drilling engineering
- Well completions
- Well testing
- Artificial lift methods
- Surface production facilities

COURSE CONTENT

Petroleum Industry

Petroleum Industry Overview

Oil and Gas Business Characteristic

Exploration activity

Production activity

Petroleum Engineering Overview

Petroleum Engineering Aspects

Basic Petroleum Geology and Exploration

Geological Mapping

Geophysics Exploration

Structure and Stratigraphy Trap

Petroleum System

Petroleum Geologists Activity

Exploration Geologists

Production Geologists

Basic Reservoir Engineering

Physical Rock and Fluid Properties

Physical Rock Properties

Porosity

Saturation

Permeability

Wettability

Fluid Properties

Density and API Gravity

Viscosity

Pour Point, Dew point, Flash Point

Type of Reservoir (Gas, Condensate, Oil)

Drive Mechanism and Performance Reservoir

Reservoir Reserves (Volumetric, Material Balance, Decline Curve)

Basic Drilling Engineering

Drilling Rig Component

Drilling Programs

Drilling Operations

Well Completion

Basic Production Engineering

Well Testing

Flowing Well

Artificial Lift (Gas Lift, Sucker rod Pump, ESP)

Surface Facility

Flowline,

Pump and Compressor,

Manifold,

Separator,

Gas Processing Plant,

Tank Storage

Production Operation

Who Should Attend

This course is designed for oil and gas professionals who do not have a petroleum engineering background and for those who need to have a technical overview of petroleum engineering and operations.

About The 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's degree in 1999 from Bandung Institute of Technology. He then received Dr. Ing. degree from the Clausthal University of Technology in Germany in 2006.

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 lditrain@indo.net.id.

LDI's Outline /Basic Petroleum Technology/