PETROLEUM ENGINEERING FOR NON-PETROLEUM ENGINEERS (PENPE)

2 - 6 April 2018 | 3 - 7 September 2018

Block M4, IBD UTM Kuala Lumpur, MALAYSIA



Institute of Bioproduct Development





COURSE INTRODUCTION

This course will enable your organization or company to answer the following questions:

A 5-day comprehensive introduction to the technology, terminology and operations of the petroleum industry. The course discusses what the industry does and the tools it uses, decision-making processes, economic results and the risks involved. Class exercises provide practical experience and insight into what is involved in doing business in today's industry.

COURSE OBJECTIVE

This course provide students with a comprehensive introduction to the oil and gas industry including technology, terminology, operations, decisions and economics, as well as helping participants to better understand their work and how it relates to others in the company and to the industry.

What you can expect to gain

- Tools and operations involved in oil and gas industry
- Basic geology as related to oil and gas reservoirs
- Reservoir fluid and rock properties
- Reservoir definition and development; production and recovery
- Fundamentals of drilling, well completions and production operations
- Basic concepts of primary and enhanced recovery operations
- Surface operations
- Issues in the petroleum business and the relationship between them.

WHO SHOULD ATTEND

- Non-Petroleum Engineers or Scientists
- Management, Executives and Field
- Support Staff working in oil and gas industry
- New hires
- Executives
- Sales and marketing
- IT services
- Accounting

COURSE CONTENT

Day 1

- Introduction to petroleum industry
- Field Life Cvcle
 - Exploring for oil and gas
- Hydrocarbon origins and accumulations
- Well logaing
- Reservoir geology
- **Drilling Systems** •
- Drilling Operations •
- Well Planning •
- Well Control •
- Casing and Cementing .
- Well Completion .

Dav 2

- Fundamentals of Reservoir Engineering •
- Reservoir Rocks
- Concepts of Permeability, Porosity and Saturation
- **Reservoir Fluid Properties**
- Fluid Sampling and PVT analysis
- Coring and Core Analysis
- Volumetric (Reserves) Estimation
- Deterministic Methods
- Inputs to Volumetric Estimates .
- Reservoir Dynamic Behaviour
- Reservoir Drive Mechanism •
- Fluid Displacement •
- **Prediction Methods**

Day 3

- Reservoir Modeling and Simulation
- Development of a finite difference model
- Derivation of governing equations and discretisation to obtain various difference schemes
- Different approaches in generating the coefficient matrices
- Errors in finite difference schemes
- Matrix solvers
- Errors in Data Handling •
- History matching •
- EOR Recovering the • remaining Oil
- Thermal techniques
- **Chemical Techniques** •
- Miscible Processes •
- Microbial Processes and others
- Well Testina .

Day 4 & 5

- Petroleum Production System •
- **Petroleum Facilities Operation** •
- Gaslift System •
- **Offshore Petroleum Facilities** •
- **Gas Processing Facilities** •
- **Oil Production Facilities** •
- Land and offshore production facilities
- Crude oil Terminal and Storage Tanks
- Transportation system

COURSE TUTORS Assoc. Prof. ISSHAM ISMAIL

He is an Associate Professor and the Head of Petroleum Engineering Department (DPE) of Universiti Teknologi Malaysia (UTM). Graduated with a Diploma and B.Sc. in Petroleum Engineering from UTM, and a M.Sc. in Petroleum Engineering from Imperial College of London. Prior to joining UTM in 1988, he worked as a Field Engineer with Amsito Oilwell Services (M) Sdn. Bhd. Interestingly, he also had the exposure to the North Sea Petroleum Industry via a summer project at Amoco (UK) Exploration. Previous assignments in the DPE were Head of Production Lab, Head of Drilling Lab, and Head of Drilling & Production Panel. His area of expertise is drilling and production, and among the notable projects that had been successfully completed were Improve of Crude Oil Production via Reduction of Formation Damage, The Use of Local Iron-based Materials in Drilling Mud, Drilling Fluid Formulations, and The Use of Local Materials in Drilling Fluid. The Human Resource Development Study for the State of Terengganu, Waste Water Treatment Plant Effluent Study, and EIA for a Proposed Housing Development & Miri Extension on Canada Hill, Sarawak, were among the consultancy projects that he had accomplished. He is active in presenting technical papers in local and international conferences, and published many articles in journals and encyclopedia. His other major contribution in writing is the publication of several petroleum engineering reference books. He has led and

conducted many petroleum short courses for local and foreign oil and gas related companies, and various book-writing courses to Malaysian higher learning institutions.



Petroleum Engineering For Non-Petroleum Engineers (PENPE)

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YES! I would like to register the following participants

Name 1	
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Job Title

Name 2

Job Title

COMPANY INFORMATION

Company

Address

Town

State

Tel

Email

Authorised Signatory (*This registration is invalid without signature from an authorised officer)

Fax

Name	
Job Title	
Tel	Fax
Email	

COURSE FEE

Fee is inclusive of lunch, refreshments and course materials. Accommodation is not included.

Local Participant	International Participant
rm 3127	EURO 1850

Method of Payment

Please kindly complete and return the reply form 3 weeks before the commencement date together with :

Local Participant

Cheque / Bank Draft which are made payable to **PHYTO BIZNET SDN. BHD.**

International Participant Direct Transfer/Bank Draft : IBD Bank details : CIMB Bank Berhad, Universiti Teknologi Malaysia 81310 UTM Johor Bahru, Johor, Malaysia

Please instruct your bank to remit us the full amount, net of bank charges

Account No : 0118 - 0004178 - 05 - 7 Swift Code **CIBBMYKL**

Cancellation & Substitutions

A full refund will be promptly made for all written cancellations 2 weeks before the course. 50% refund will be made for written cancellations received 7 days before the course. A substitute may be made at any time.

Note

A) The organiser has the right to make any amendments that they deem to be in the best interest of the course and to cancel the course if insufficient registrations are received a week before course commencements date.

B) CERTIFICATE OF ATTENDANCE will be awarded at the end of the course.

Assoc. Prof. AZMI MOHD ARSHAD

Mr. Azmi Mohd Arshad joined the Universiti Teknologi Malaysia in 1987, and currently is a Senior Lecturer at the Petroleum Engineering Department. Graduated with B.Sc. in Mineral Engineering (Petroleum) from University of Alabama, USA, and a M.Sc. in Petroleum Engineering from Imperial College of London. He conducts undergraduate courses in basic engineering and reservoir engineering, carries out research in reservoir simulation and oil pollution, and has presented many technical papers in local and international conferences. He is also actively involved in giving seminars and conferences related to petroleum industries.



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For more information, please contact INSTITUTE OF BIOPRODUCT DEVELOPMENT UNIVERSITI TEKNOLOGI MALAYSIA 81310 UTM Johor Bahru, Johor

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