



**QUATE**

**Energy Quest Upstream Training Excellence**

[www.energyquest.com.my](http://www.energyquest.com.my)

[training@energyquest.com.my](mailto:training@energyquest.com.my)

# TRAINING & FIELD TRIP



# A Word from the Management

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Established in 2004, ENERGY QUEST Sdn Bhd is an oil and gas consulting company providing premium Exploration & Production (E&P) services and total solutions to the upstream clients worldwide. Since its inception, ENERGY QUEST has been providing training to young professionals through student internship program and on-the-job secondment. As an expansion to that, ENERGY QUEST is now embarking on providing structured technical courses on a more regular basis opening to all relevant industries and bodies leveraging on its consultants' experience.

Our courses are designed with industrial standard emphasizing on practical approach. The courses are developed and catered for all level professionals, cross disciplined personnel in the subsurface domain within oil and gas industry as well as to the public which includes banking/ investment institution and relevant government authorities.

Our instructors are from the pool of in-house professional consultants mostly having between 10 to 30 years working experience in the oil and gas industry, well-versed with the Malaysian and international basins and passionate to pass down their knowledge and experience.

It is an honour and pleasure to present to you our humble course offerings that are the brainchild of our instructors and consultants from their years of experience and hands-on knowledge. We, at ENERGY QUEST believe that integration between subsurface disciplines is the key to excellence in the upstream oil and gas business. ENERGY QUEST has completed numerous local and international projects to meet clients' needs. All the latest technical tools and applications come to naught if we neglect the single most important variable in the execution of a project; the technical staff.

We aim to be the bridge to empower your technical staff to lead your organization in any upstream oil and gas business endeavor.

For more information about our public courses or customer-tailored training programs, please contact us at [training@energyquest.com.my](mailto:training@energyquest.com.my) or visit our website at [www.energyquest.com.my](http://www.energyquest.com.my).

# Monthly Calendar

Code	Course Title	Duration	Date
<b>MARCH</b>			
FTI01	Structural Geology: Langkawi Islands & Perlis	3 days	4-6 Mar 2013
GLI04	Introduction to Biostratigraphy	1 day	5 Mar 2013
PEI04	Introduction to Enhanced Oil Recovery	1 day	5 Mar 2013
FTI05	Geology for Petroleum Engineers: Kuala Lumpur	1 day	7 Mar 2013
GLI01	Fundamentals of Petroleum Geology	5 days	18-22 Mar 2013
EC201	Introduction to Petroleum Economics	1 day	18 Mar 2013
EC301	Overview of Petroleum Arrangement	2 days	19-20 Mar 2013
EC401	Upstream Project Economics Modeling	2 days	21-22 Mar 2013
GPI01	Seismic Acquisition & Processing	1 day	25 Mar 2013
PEI01	Laboratory Analysis: Overview of Rock & Fluid Analysis	1 day	25 Mar 2013
GPI02	Seismic Inversion	1 day	26 Mar 2013
PEI03	Oil & Gas Reserves	1 day	26 Mar 2013
GP201	Seismic Interpretation	2 days	27-28 Mar 2013
PE205	Reservoir Simulation	1 day	27 Mar 2013
PE206	Reservoir Management Plan	1 day	28 Mar 2013
<b>APRIL</b>			
GLI05	Oil & Gas Exploration Tools	1 day	1 Apr 2013
PE201	Integrated Approach in the Formulation of a Field Development Plan	1 day	1 Apr 2013
GLI03	Mapping Techniques, Volumetric Assessment & Risk Uncertainties	1 day	2 Apr 2013
PEI02	Reservoir Engineering for Geoscientists	1 day	2 Apr 2013
FTI07	Geology of Western Belt of Peninsular Malaysia: Kuala Lumpur-Langkawi	3 days	8-10 Apr 2013
PE207	Gas Lift Optimization	3 days	15-17 Apr 2013
GL301	Plate Tectonics & Regional Geology of Southeast Asia	3 days	15-17 Apr 2013
FT201	Geology of Northern Sabah: Sabah	5 days	22-26 Apr 2013
GL201	Fundamentals of Sequence Stratigraphy	2 days	22-23 Apr 2013
FE201	Log Interpretation	2 days	22-23 Apr 2013
<b>MAY</b>			
FTI06	Field Techniques of Structures in 'Hard Rock': Pahang-Terengganu	3 days	6-8 May 2013
GLI01	Fundamentals of Petroleum Geology	5 days	13-17 May 2013
GPI01	Seismic Acquisition & Processing	1 day	13 May 2013
PEI01	Laboratory Analysis: Overview of Rock & Fluid Analysis	1 day	13 May 2013
GPI02	Seismic Inversion	1 day	14 May 2013
PEI03	Oil & Gas Reserves	1 day	14 May 2013
GP201	Seismic Interpretation	2 days	15-16 May 2013
PE205	Reservoir Simulation	1 day	15 May 2013
PE206	Reservoir Management Plan	1 day	16 May 2013

# Monthly Calendar

Code	Course Title	Duration	Date
<b>JUNE</b>			
GL102	Structural Geology in Hydrocarbon Exploration	3 days	4-6 June 2013
PE202	Practical RE: Basic Rock & SCAL	1 day	4 June 2013
PE203	Practical RE: Basic PVT & Fluid Analysis	1 day	5 June 2013
PE204	Practical RE: Pressure Transient Analysis & Well Modeling Concept	1 day	6 June 2013
FT103	Structural Geology: Selangor-Pahang- Negeri Sembilan-Southwest Kelantan	3 days	10-12 June 2013
FT202	Geology of Tinjar Province: Sarawak	5 days	17-21 June 2013
GL104	Introduction to Biostratigraphy	1 day	17 June 2013
PE104	Introduction to Enhanced Oil Recovery	1 day	17 June 2013
EC201	Introduction to Petroleum Economics	1 day	24 June 2013
EC301	Overview of Petroleum Arrangement	2 days	25-26 June 2013
EC401	Upstream Project Economics Modeling	2 days	27-28 June 2013
<b>SEPTEMBER</b>			
GL104	Introduction to Biostratigraphy	1 day	2 Sept 2013
PE104	Introduction to Enhanced Oil Recovery	1 day	2 Sept 2013
FT109	Fractured Basement: Redang Island	3 days	4-6 Sept 2013
GL201	Fundamentals of Sequence Stratigraphy	2 days	9-10 Sept 2013
FE201	Log Interpretation	2 days	9-10 Sept 2013
GL105	Oil & Gas Exploration Tools	1 day	12 Sept 2013
PE201	Integrated Approach in the Formulation of a Field Development Plan	1 day	12 Sept 2013
FT108	Fractured Basement: Pahang-Terengganu-Johor	3 days	23-25 Sept 2013
GL103	Mapping Techniques, Volumetric Assessment & Risk Uncertainties	1 day	23 Sept 2013
PE102	Reservoir Engineering for Geoscientists	1 day	23 Sept 2013
GL102	Structural Geology in Hydrocarbon Exploration	3 days	24-26 Sept 2013
PE202	Practical RE: Basic Rock & SCAL	1 day	24 Sept 2013
PE203	Practical RE: Basic PVT & Fluid Analysis	1 day	25 Sept 2013
PE204	Practical RE: Pressure Transient Analysis & Well Modeling Concept	1 day	26 Sept 2013
EC201	Introduction to Petroleum Economics	1 day	30 Sept 2013
<b>OCTOBER</b>			
EC301	Overview of Petroleum Arrangement	2 days	1-2 Oct 2013
EC401	Upstream Project Economics Modeling	2 days	3-4 Oct 2013
GL301	Plate Tectonics & Regional Geology of Southeast Asia	3 days	7-9 Oct 2013
PE207	Gas Lift Optimization	3 days	7-9 Oct 2013
GPI01	Seismic Acquisition & Processing	1 day	21 Oct 2013
GPI02	Seismic Inversion	1 day	21 Oct 2013
PE101	Laboratory Analysis: Overview of Rock & Fluid Analysis	1 day	22 Oct 2013
PE103	Oil & Gas Reserves	1 day	22 Oct 2013
GP201	Seismic Interpretation	2 days	23-24 Oct 2013



# Monthly Calendar

Code	Course Title	Duration	Date
<b>OCTOBER</b>			
PE205	Reservoir Simulation	1 day	23 Oct 2013
PE206	Reservoir Management Plan	1 day	24 Oct 2013
<b>NOVEMBER</b>			
GL105	Oil & Gas Exploration Tools	1 day	11 Nov 2013
PE201	Integrated Approach in the Formulation of a Field Development Plan	1 day	11 Nov 2013
GP101	Seismic Acquisition & Processing	1 day	12 Nov 2013
PE101	Laboratory Analysis : Overview of Rock & Fluid Analysis	1 day	12 Nov 2013
GP102	Seismic Inversion	1 day	13 Nov 2013
PE103	Oil & Gas Reserves	1 day	13 Nov 2013
GP201	Seismic Interpretation	2 days	18-19 Nov 2013
PE205	Reservoir Simulation	1 day	18 Nov 2013
PE206	Reservoir Management Plan	1 day	19 Nov 2013
GL104	Introduction to Biostratigraphy	1 day	20 Nov 2013
PE104	Introduction to Enhanced Oil Recovery	1 day	20 Nov 2013
FT104	Fundamentals of Petroleum Geology: Pahang	3 days	25-27 Nov 2013
<b>DECEMBER</b>			
GL103	Mapping Techniques, Volumetric Assessment & Risk Uncertainties	1 day	2 Dec 2013
PE102	Reservoir Engineering for Geoscientists	1 day	2 Dec 2013
GL102	Structural Geology in Hydrocarbon Exploration	3 days	3-5 Dec 2013
PE202	Practical RE: Basic Rock & SCAL	1 day	3 Dec 2013
PE203	Practical RE: Basic PVT & Fluid Analysis	1 day	4 Dec 2013
PE204	Practical RE: Pressure Transient Analysis & Well Modeling Concept	1 day	5 Dec 2013
FT102	Sedimentology: Pahang	3 days	9-11 Dec 2013
EC201	Introduction to Petroleum Economics	1 day	9 Dec 2013
EC301	Overview of Petroleum Arrangement	2 days	10-11 Dec 2013
EC401	Upstream Project Economics Modeling	2 days	12-13 Dec 2013
FT105	Geology for Petroleum Engineers: Kuala Lumpur	1 day	16 Dec 2013

# Geological Field Trip



STRUCTURAL GEOLOGY:  
LANGKAWI ISLANDS AND PERLIS

SEDIMENTOLOGY:  
PAHANG

STRUCTURAL GEOLOGY:  
SELANGOR-PAHANG- NEGERI SEMBILAN-SOUTHWEST  
KELANTAN

FUNDAMENTALS OF PETROLEUM GEOLOGY:  
PAHANG

GEOLOGY FOR PETROLEUM ENGINEERS:  
KUALA LUMPUR

FIELD TECHNIQUES OF STRUCTURES IN 'HARD ROCK':  
PAHANG-TERENGGANU

GEOLOGY OF NORTHERN SABAH:  
SABAH

GEOLOGY OF WESTERN BELT OF PENINSULAR MALAYSIA:  
KUALA LUMPUR-LANGKAWI

FRACTURED BASEMENT:  
PAHANG-TERENGGANU-JOHOR

FRACTURED BASEMENT:  
REDANG ISLAND

GEOLOGY OF TINJAR PROVINCE:  
SARAWAK

# Geological Field Trip



## **STRUCTURAL GEOLOGY : LANGKAWI ISLANDS AND PERLIS (FTI01)**

**Course Instructor:** PROF EMERITUS TJIA HONG DJIN

**Course Duration:** Three (3) days field trip

Hop on the time machine and take a trip back in time to the oldest rock formation in the region. See, touch and understand the Malaysian Cambrian era. Langkawi Geological Park will definitely impress you with the significance of this geological heritage as it has been continuously studied for the past 35 years.

## **SEDIMENTOLOGY : PAHANG (FTI02)**

**Course Instructor:** MANSOR AHMAD

**Course Duration:** Three (3) days field trip

Let us take you through the outcrops of continental, coastal plain, shallow marine, carbonate and turbidite; making your understanding of sedimentary rocks and reservoir properties as easy as ABC.

## **FUNDAMENTALS OF PETROLEUM GEOLOGY : PAHANG (FTI04)**

**Course Instructor:** MANSOR AHMAD

**Course Duration:** Three (3) days field trip

From petroleum systems to play concepts, resource assessment to volumetric estimation, this fieldtrip was designed to get you started with the fundamentals of petroleum geology.

## **STRUCTURAL GEOLOGY : SELANGOR-PAHANG-NEGERI SEMBILAN-SOUTHWEST KELANTAN (FTI03)**

**Course Instructor:** PROF EMERITUS TJIA HONG DJIN

**Course Duration:** Three (3) days field trip

Palaeozoic metaclastics and granitoid; understand the fracture architecture and how it is related to the geological development of Peninsular Malaysia. Beginning from the Titiwangsa Main Range, the trip will proceed to Mesozoic tectonic structures and conclude with the observation of Bentong Suture zone elements.

## **GEOLOGY FOR PETROLEUM ENGINEERS : KUALA LUMPUR (FTI05)**

**Course Instructor:** MANSOR AHMAD

**Course Duration:** One (1) day field trip

Leave your numbers, calculations and plots behind as this trip will equip you with the fundamentals of geology and different types of lithologies. Tailored for engineers, this trip will guide you in identifying various types of rocks around Kuala Lumpur and as you will see, it's as easy as 1,2,3.



# Geological Field Trip

## **FIELD TECHNIQUES OF STRUCTURES IN 'HARD ROCK' : PAHANG-TERENGGANU (FT106)**

**Course Instructor:** PROF EMERITUS TJIA HONG DJIN

**Course Duration:** Three (3) days field trip

This trip will guide you to achieve the fundamentals of field techniques, such as measurements of structure elements and the applications of it.

## **GEOLOGY OF NORTHERN SABAH : SABAH (FT201)**

**Course Instructor:** MANSOR AHMAD

**Course Duration:** Five (5) days field trip

Join us in this spectacular outcrops of Kudat, the tips of Borneo and the breathtaking islands off the northern tip of Sabah. This trip presents an overview of the regional geology, sedimentology, stratigraphy and structure of the area.

## **GEOLOGY OF WESTERN BELT OF PENINSULAR MALAYSIA : KUALA LUMPUR-LANGKAWI (FT107)**

**Course Instructor:** PROF EMERITUS TJIA HONG DJIN

**Course Duration:** Three (3) days field trip

Familiarization with geology aspects of the Western Belt of Peninsular Malaysia. Understand the stratigraphy, structure and reservoir architecture of crystalline basement rocks.

## **FRACTURED BASEMENT : PAHANG-TERENGGANU-JOHOR (FT108)**

**Course Instructor:** MANSOR AHMAD

**Course Duration:** Three (3) days field trip

Join us on this trip and put on your detective hat as we will study the fracture architecture of different types of rocks and decipher the clues given by the structure trends along the east coast of Peninsular Malaysia.

## **FRACTURED BASEMENT : REDANG ISLAND (FT109)**

**Course Instructor:** PROF EMERITUS TJIA HONG DJIN

**Course Duration:** Three (3) days field trip

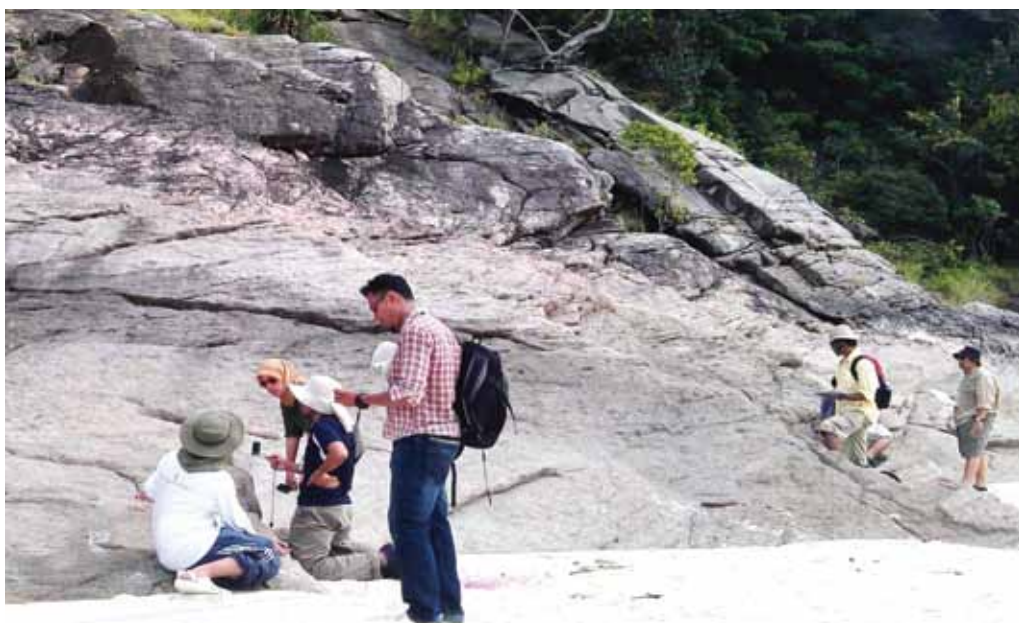
An introduction to the geology and fractured basement rocks of Pulau Redang. Understand the regional geology, structure elements and trends of the area.

## **GEOLOGY OF TINJAR PROVINCE : SARAWAK (FT202)**

**Course Instructor:** MANSOR AHMAD

**Course Duration:** Five (5) days field trip

An overview introduction to the geology of Tinjar Province. Enjoy and understand the sedimentology, depositional environments and structural elements of the area.



# Geology



FUNDAMENTALS OF PETROLEUM GEOLOGY

PLATE TECTONICS & REGIONAL GEOLOGY OF  
SOUTHEAST ASIA

STRUCTURAL GEOLOGY IN HYDROCARBON  
EXPLORATION

FUNDAMENTALS OF SEQUENCE STRATIGRAPHY

INTRODUCTION TO BIOSTRATIGRAPHY

OIL & GAS EXPLORATION TOOLS

MAPPING TECHNIQUES, VOLUMETRIC ASSESSMENT  
& RISK UNCERTAINTIES



# Geology



## PLATE TECTONICS AND REGIONAL GEOLOGY OF SOUTHEAST ASIA (GL301)

**Course Level:** Intermediate

**Course Instructor:** PROF EMERITUS TJIA HONG DJIN

**Designed For:** Exploration and production geologists and geophysicists.

**Course Duration:** Three (3) days classroom

**Course Outline:**

- Fundamentals of the plate tectonic hypothesis
- Plate tectonic framework of Southeast Asia, which includes the land and sea areas of Indosinia (continental SE Asia), Sumatera, Jawa, Kalimantan/Borneo, and Peninsular Malaysia
- Plate tectonic elements of SE Asia comprising seismicity, volcanism, gravity, and palaeomagnetism
- Geology of the Malacca Straits Basin
- Geology of the Malay and Penyu Basin
- Geology of the Sarawak Basin
- Geology of the Baram Delta
- Geology of the Northwest Sabah Basin
- Geology of the basins of Eastern Sabah Basin

## FUNDAMENTALS OF PETROLEUM GEOLOGY (GL101)

**Course Level:** Basic

**Course Instructor:** MANSOR AHMAD & SAMSUDIN ABD HAMID

**Designed For:** Exploration and production geologists and geophysicists.

**Course Duration:** Two (2) days classroom and three (3) days field trip

**Course Outline:**

- Identification of the petroleum system elements
- Play concept, prospect ranking and risking
- Resource assessment and volumetric estimation
- Outcrop visit from Chenor to Paloh Hinai, Pahang to understand reservoir properties, sedimentary features and structures of continental to marine deposits
- Carbonate and turbidite sediment outcrop visit in Jerantut, Pahang and to log outcrop section to understand sequence stratigraphy concept
- Fracture granite basement outcrop visit to Bukit Tinggi, Pahang

## STRUCTURAL GEOLOGY IN HYDROCARBON EXPLORATION (GL102)

**Course Level:** Basic

**Course Instructor:** PROF EMERITUS TJIA HONG DJIN

**Designed For:** Exploration and production geologists and geophysicists.

**Course Duration:** Three (3) days classroom

**Course Outline:**

- Fundamentals of structural geology
- Interpretation of conventional geological maps and outcrop details
- Interpretation of subsurface maps (time slices and structure)
- Interpretation of geological stress from outcrops, conventional geological maps, morphotectonics



## FUNDAMENTALS OF SEQUENCE STRATIGRAPHY (GL201)

**Course Level:** Basic-Intermediate

**Course Instructor:** ZAINUDDIN CHE SOH

**Designed For:** Geoscientists and engineers who have a minimum of one year experience in the industry. Attendees should know the principles of well log correlations, basic log characteristics in relation to rock types and log pattern to depositional setting.

**Course Duration:** Two (2) days classroom

**Course Outline:**

- Definitions of sequence stratigraphic terminologies.
- Fundamentals of earth eustasy.
- Overview of various depositional systems and settings.
- Overview of tracts system
- Discussion of lithological versus chrono-stratigraphic correlations
- Application of seismic methods in sequence stratigraphy.
- Carbonate sequence stratigraphy

## OIL & GAS EXPLORATION TOOLS (GL105)

**Course Level:** Basic

**Course Instructor:** SAMSUDIN ABDUL HAMID

**Designed For:** Oil and gas executive, petroleum engineer, asset managers, junior explorationist.

**Course Duration:** One (1) day classroom

**Course Outline:**

- Introduction to petroleum system and basin
- Overview of various exploration method including aerial photograph, gravity method, magnetic method, magneto telluric, SLB/CSEM, surface geological survey, geochemical method and seismic survey



## INTRODUCTION TO BIOSTRATIGRAPHY (GL104)

**Course Level:** Basic

**Course Instructor:** AHMAD MUNIF KORAINI

**Designed For:** Personnel in need of basic geological training including geoscientists, engineers, geophysicists, technical support and administrative personnel.

**Course Duration:** One (1) day classroom

**Course Outline:**

- Introduction to biostratigraphy
- Macrofossils
- Microfossils (Foraminifera, Nannofossils and Palynomorphs)
- Bio-zones and age determination
- Biofacies, processes and depositional environment
- Application of biostratigraphy
- Intergration of biostratigraphic data and paleoenvironmental interpretation
- Case study

## MAPPING TECHNIQUES, VOLUMETRIC

## ASSESSMENT & RISK UNCERTAINTIES (GL103)

**Course Level:** Basic

**Course Instructor:** SAMSUDIN ABDUL HAMID

**Designed For:** Oil and gas executive, petroleum engineer, asset managers, junior explorationist.

**Course Duration:** One (1) day classroom

**Course Outline:**

- Overview of various types and component of a map
- Data collection and map generation
- Introduction to various method in volumetric assessment
- Volumetric method and parameter
- Various trap area calculation tips
- Overview of prospect geological risking and the parameters
- Introduction to prospect geological model

# Geophysics



SEISMIC ACQUISITION AND PROCESSING

SEISMIC INVERSION

SEISMIC INTERPRETATION

# Geophysics

## SEISMIC ACQUISITION AND PROCESSING (GP101)

**Course Level:** Basic

**Course Instructor:** NOR AZHAR IBRAHIM

**Designed For:** Personnel in need of basic seismic acquisition training. Geophysicists who work in seismic data acquisition, seismic data processing, Geoscientists, seismic interpreters and team leaders who want to learn more about seismic data acquisition.

**Course Duration:** One (1) day classroom

### Course Outline:

- Seismic acquisition principles
- Seismic signal & noise
- Acquisition planning
- Survey parameters and design
- Positioning
- Seismic energy sources
- Seismic detectors
- Seismic recording systems
- Quality control

## SEISMIC INVERSION (GP102)

**Course Level:** Basic

**Course Instructor:** NOR AZHAR IBRAHIM

**Designed For:** Personnel in need of introduction to seismic inversion. Geophysicists, geologists, geoscientists, seismic interpreters, technical support personnel, seismic data processors, exploration, production, and acquisition managers, who need a clear understanding of the details of implementation and application of this technology.

**Course Duration:** One (1) day classroom

### Course Outline:

- Introduction to acoustic impedance and seismic inversion
- Seismic inversion requirement
- Qualitative use
- Quantitative use
- Types of inversion (Sparse spike and coloured inversion)

## SEISMIC INTERPRETATION (GP201)

**Course Level:** Basic-Intermediate

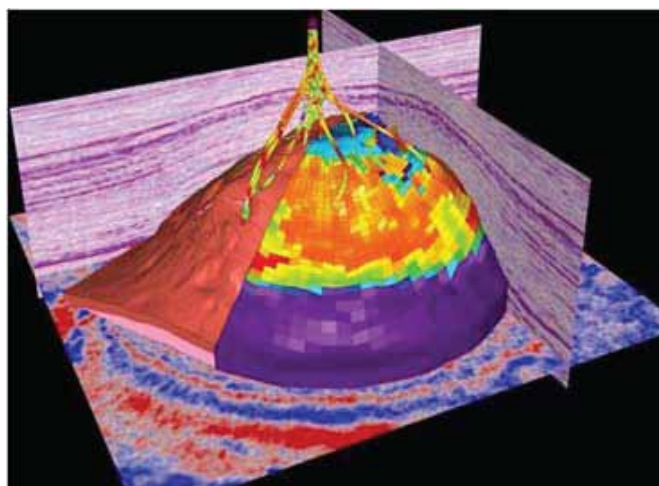
**Course Instructor:** ZAINUDDIN CHE SOH

**Designed For:** Geoscientists and engineers who have at least one year of experience in oil industry. Attendees should be familiar with interpretation and geological software. Seasoned interpreters are probably not suitable to attend this course.

**Course Duration:** Two (2) days classroom

### Course Outline:

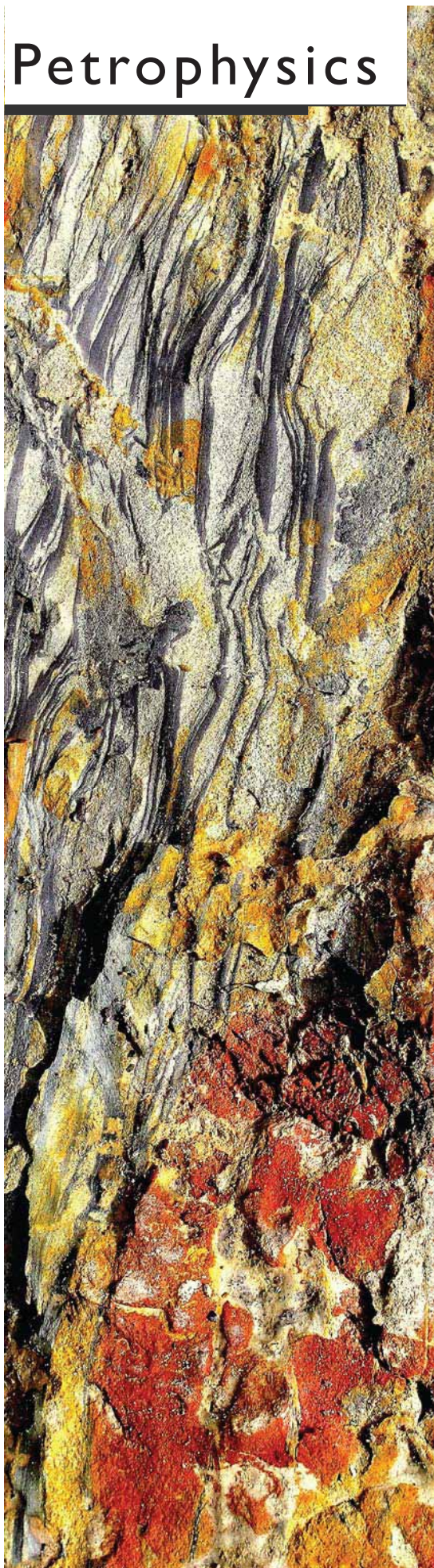
- Principles of seismic waves, polarity conventions and synthetic generations. Importance of zero-phasesness
- Horizons and fault picking methods using manual and automated techniques with examples from simple and complex structures
- Time-Depth conversion methods using stacking and well velocities
- Attribute extractions and analysis. Attributes for structural, stratigraphic and hydrocarbon distributions
- Discussion of the importance of AVO and seismic inversions in present day interpretation
- Exploration and field development tasks





# Petrophysics

LOG INTERPRETATION



**ENERGY QUEST SDN BHD**, Suite 7.01A & 7.01B, 7<sup>th</sup> Floor, Menara KH, Jalan Sultan Ismail, 50250 Kuala Lumpur, Malaysia.  
Email: [training@energyquest.com.my](mailto:training@energyquest.com.my) Website: [www.energyquest.com.my](http://www.energyquest.com.my) Tel: 603 2143 4228 Fax: 603 2142 4229

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# Petrophysics

## LOG INTERPRETATION (FE201)

**Course Level:** Basic-Intermediate

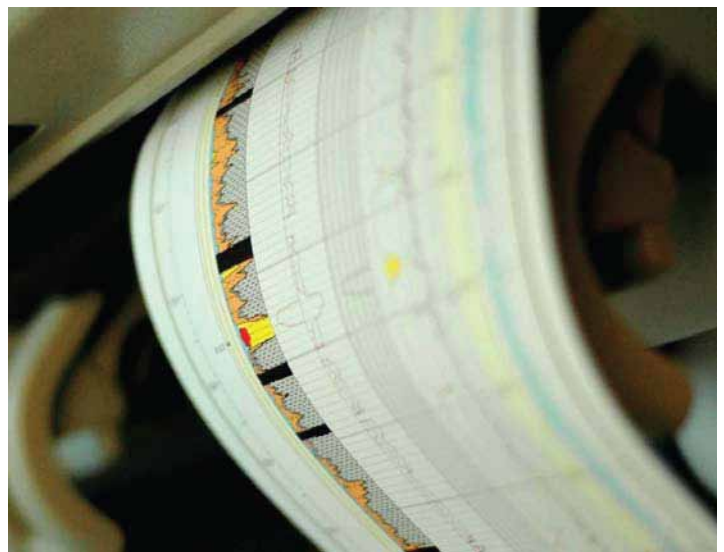
**Course Instructor:** MUHAMMAD MASOOD AKHTAR

**Designed For:** Oil and Gas Companies technical staff

**Course Duration:** Two (2) days classroom

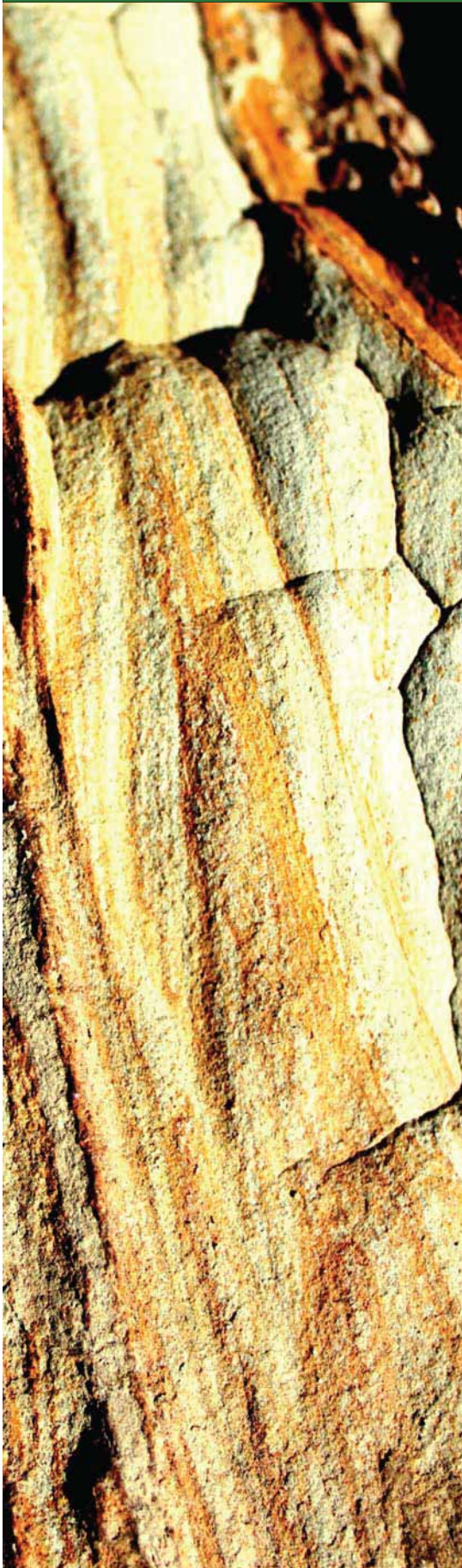
### Course Outline:

- General overview of logs analysis, petrophysics and formation evaluation
- Basic theory of open hole logging tools
- Logs interpretation techniques and methodologies and environmental effects on logs and the correction procedures
- Petrophysical/ geological models for clastics and carbonates
- Types of porosity
- Water saturation models
- Application of logs to estimate reservoirs petrophysical properties
- Porosity ~ permeability transforms
- NMR petrophysics
- Image logs petrophysics
- Laboratory measurements of rocks(cores) and fluids properties
- Integration of cores (RCAL, SCAL, Cap Pressure) and logs data
- Capillary pressure and water saturation modeling
- ANN modeling for prediction of reservoirs petrophysical Properties
- Unconventional reservoirs





# Sub-surface Engineering



LABORATORY ANALYSIS : OVERVIEW OF ROCK  
& FLUID ANALYSIS

INTEGRATED APPROACH IN THE  
FORMULATION OF A FIELD DEVELOPMENT PLAN

RESERVOIR ENGINEERING FOR GEOSCIENTISTS

PRACTICAL RE: BASIC ROCK & SCAL

PRACTICAL RE: BASIC PVT & FLUID ANALYSIS

PRACTICAL RE: PRESSURE TRANSIENT ANALYSIS & WELL  
MODELING CONCEPT

RESERVOIR SIMULATION

RESERVOIR MANAGEMENT PLAN

OIL & GAS RESERVES

INTRODUCTION TO ENHANCED OIL RECOVERY

GAS LIFT OPTIMIZATION



# Sub-surface Engineering



## LABORATORY ANALYSIS : OVERVIEW OF ROCK & FLUID ANALYSIS (PEI01)

**Course Level:** Basic

**Course Instructor:** AHMAD MUNIF KORAINI

**Designed For:** Personnel in need of basic geological training including geoscientists, engineers, geophysicists, technical support and administrative personnel.

**Course Duration:** One (1) day classroom

### Course Outline:

- Introduction to rock and fluid laboratory analysis
- Core handling and sampling program
- Routine core analysis (RCAL)
- Special core analysis (SCAL)
- Geological analysis (Sedimentology, Biostratigraphy & Geochemistry)
- PVT analysis
- Application of rock and fluid laboratory analyses

## INTEGRATED APPROACH IN THE FORMULATION OF A FIELD DEVELOPMENT PLAN (PE201)

**Course Level:** Basic-Intermediate

**Course Instructor:** ALLIDA MUHAMMAD SAID

**Designed For:** Oil and gas executives; petroleum engineers, geoscientists, corporate/ asset planners, asset managers and project managers.

**Course Duration:** One (1) day classroom

### Course Outline:

- Field Development Life Cycle
- Integrated Field Development Plan
- Critical roles in E&P activities
- Economics and Risks of Field Development Prospects

## RESERVOIR ENGINEERING FOR GEOSCIENTISTS (PEI02)

**Course Level:** Basic

**Course Instructor:** KHAIRUL AZLI KHALID

**Designed For:** Engineers and geoscientists involved in field surveillance and reservoir studies.

**Course Duration:** One (1) day classroom

### Course Outline:

- Understanding of basic reservoir engineering fundamentals - Practical knowledge to communicate and work effectively with reservoir engineers
- Practical guide in the interpretation of pressure data and integration with geoscience information
- Understanding of fluid properties generated to be used in volumes and recovery calculations
- An overview of engineers' role in fluid-rock behavior determination and its impact to field recovery
- Understanding of the different tools available to the engineer in field recovery estimation

## PRACTICAL RE: BASIC ROCK & SCAL (PE202)

**Course Level:** Basic-Intermediate

**Course Instructor:** KHAIRUL AZLI KHALID

**Designed For:** Engineers and geoscientists involved in field surveillance and reservoir studies.

**Course Duration:** One (1) day classroom

### Course Outline:

- Discussion of a typical rock analyses workflow
- Discussion and in-class exercise of calibration and correction of core data
- Understanding of wettability concepts and the relation to other rock properties
- Overview of laboratory measurements and practical advice on applicability of each method
- Relative permeability data correction with in-class exercise
- Overview of methods available in capillary pressure data analysis
- Tables generation for use in reservoir simulation with in-class exercise

# Sub-surface Engineering

## **PRACTICAL RE: BASIC PVT & FLUID ANALYSIS (PE203)**

**Course Level:** Basic-Intermediate

**Course Instructor:** KHAIRUL AZLI KHALID

**Designed For:** Engineers and geoscientists involved in field surveillance and reservoir studies.

**Course Duration:** One (1) day classroom

**Course Outline:**

- Understanding of the basic oil and gas Pressure-Volume-Temperature (PVT) concepts
- Understanding of the standard fluid sampling and measurement activities
- Overview of available tools for fluid properties generation with in-class exercise
- Practical tips for matching Equation of State to laboratory results
- Practical use of PVT information in Field Operations/ Surveillance

\* Participants are required to bring a personal laptop compatible with Microsoft Office for this course.

## **PRACTICAL RE: PRESSURE TRANSIENT ANALYSIS & WELL MODELING CONCEPT (PE204)**

**Course Level:** Basic-Intermediate

**Course Instructor:** KHAIRUL AZLI KHALID

**Designed For:** Engineers and geoscientists involved in field surveillance and reservoir studies.

**Course Duration:** One (1) day classroom

**Course Outline:**

- Recognition of the critical elements in well test
- Appreciation of the fundamental equations governing well test analysis
- Interpretation of the pressure build-up test using classical techniques with in-class exercise
- Overview of basic well test planning and design with simple to remember exercises
- Overview of derivative analysis and its advantages and limitations in interpreting well tests
- Overview of gas well testing and design for use at work

## **RESERVOIR SIMULATION (PE205)**

**Course Level:** Basic-Intermediate

**Course Instructor:** MOHD BAHRULNIZAM HJ MUSA

**Designed For:** Oil and gas executives; petroleum engineers, geoscientists, corporate/ asset planners, asset managers and project managers.

**Course Duration:** One (1) day classroom

**Course Outline:**

- Understanding of the principles and objectives of reservoir simulation works
- Introduction to the basic concepts of reservoir simulation
- Understanding of the essential elements of reservoir simulation
- Introduction to the typical workflow in a reservoir simulation study

## **RESERVOIR MANAGEMENT PLAN (PE206)**

**Course Level:** Basic-Intermediate

**Course Instructor:** MOHD BAHRULNIZAM HJ MUSA

**Designed For:** Oil and gas executives; petroleum engineers, geoscientists, corporate / asset planners, asset managers and project managers.

**Course Duration:** One (1) day classroom

**Course Outline:**

- Understanding of the reservoir management objectives
- Introduction to the reservoir management process, responsibilities of different disciplines in preparation of an integrated reservoir management plan
- Understanding of the reservoir life cycle and benefits of good reservoir management and surveillance plan at each cycle
- Understanding of the relationship of reservoir uncertainties and reservoir surveillance programs as field monitoring processes
- Introduction to the reservoir management diagnostic tools and analyses

# Sub-surface Engineering

## OIL & GAS RESERVES (PE103)

**Course Level:** Basic

**Course Instructor:** ALLIDA MUHAMMAD SAID

**Designed For:** Oil and gas executives; petroleum engineers, surveillance engineers/team, corporate/asset planners, asset managers and project managers.

**Course Duration:** One (1) day classroom

**Course Outline:**

- Understanding the need for estimating reserves/resource
- Basic principles of reserves/resource classifications
- Deterministic and probabilistic approaches to volumetric assessment
- Various reserves estimation methods
- Uncertainty in reserves/resource estimation
- Introduction to the different types of reserves/resource evaluation & reporting

## INTRODUCTION TO ENHANCED OIL RECOVERY (PE104)

**Course Level:** Basic

**Course Instructor:** ALLIDA MUHAMMAD SAID

**Designed For:** Oil and gas executives; petroleum engineers, surveillance engineers/team, corporate/asset planners, asset managers and project managers.

**Course Duration:** One (1) day classroom

**Course Outline:**

- General understanding of EOR
- Definitions and descriptions of different EOR processes
- General workflow for EOR Study Phases
- Overview of Malaysian EOR Experiences

## GAS LIFT OPTIMIZATION (PE207)

**Course Level:** Basic-Intermediate

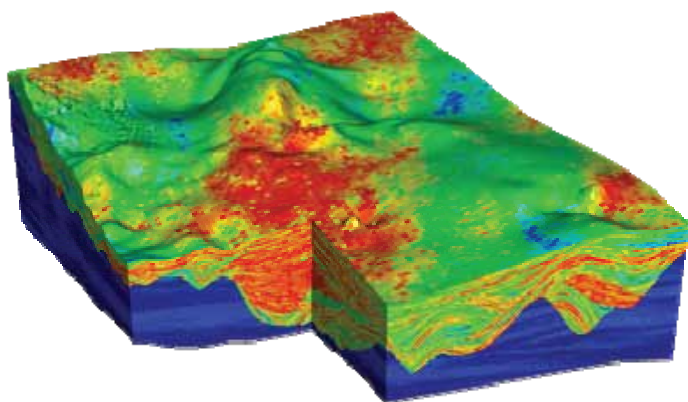
**Course Instructor:** SIES HUSSAIN

**Designed For:** Oil and gas executives; petroleum engineers, geoscientists, corporate / asset planners, asset managers and project managers.

**Course Duration:** Three (3) days classroom

**Course Outline:**

- Introduction to gas lift as a method of artificial lift
- Understanding of inflow/outflow well performance relationship
- Overview of well NODAL analysis for gas lift optimization
- Understanding of basic gas lift equipment and the knowledge of gas lift valve mechanics
- Gas lift design for continuous flow injection pressure operation
- Understanding of unloading process of a gas lift well
- Gas lift troubleshooting and surveillance techniques





# Petroleum Economics

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INTRODUCTION TO PETROLEUM ECONOMICS

OVERVIEW OF PETROLEUM ARRANGEMENT

UPSTREAM PROJECT ECONOMICS MODELING

# Petroleum Economics



## INTRODUCTION TO PETROLEUM ECONOMICS (EC201)

**Course Level:** Basic-Intermediate

**Course Instructor:** AB JALIL ALI

**Designed For:** Oil and gas executives; petroleum economists, finance analysts, corporate/asset planners, asset acquisitionist and contract negotiators.

**Course Duration:** Two (2) days classroom

**Course Outline:**

- Overview of Global Petroleum Arrangement
- Overview of cashflow analysis
- Identification of Economic Indicators - Maximum cash sink, payback, net present value (NPV), rate of return (ROR), profit investment ratio (PIR)
- Understanding of risk analysis - Sensitivity analysis, tornado chart, spider plot and construction of decision tree
- Introduction of typical green field development plan and brown field infill and workover projects

## OVERVIEW OF PETROLEUM ARRANGEMENT (EC301)

**Course Level:** Intermediate

**Course Instructor:** AB JALIL ALI

**Designed For:** All levels of oil and gas executives especially from various departments; company legal, petroleum economics, new ventures, business development, corporate planners, management finance, project management and asset acquisition/ negotiation team.

**Course Duration:** One (1) day classroom

**Course Outline:**

- Overview of Global Petroleum Arrangement - Concession, production sharing contract and risk service contracts
- Quick and dirty way of government take calculations
- Group Exercise and Presentation - "The most practical petroleum arrangement for given current political, social and economic of a country X"

## UPSTREAM PROJECT ECONOMICS MODELING (EC401)

**Course Level:** Advance

**Course Instructor:** AB JALIL ALI

**Designed For:** Petroleum economists, finance analysts and corporate/asset planners.

**Course Duration:** Two (2) days classroom

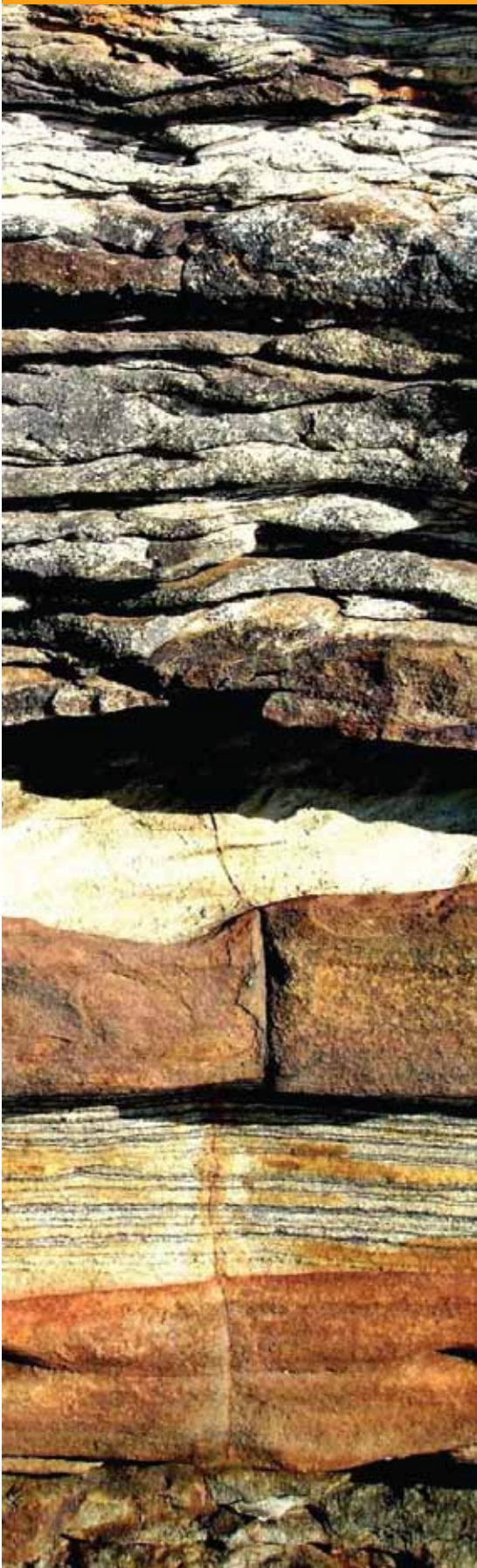
**Course Outline:**

- Overview of global petroleum arrangement
- Run through an economic model template, focusing on its input data, sequence of calculations and output results generation; IRR, NPV
- Introduction to Financial Functions and Simple Macros
- Calculations of Concession/PSC arrangement and country taxation



# Meet Your Instructors

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PROF EMERITUS TJIA HONG DJIN

MANSOR AHMAD

AHMAD MUNIF KORAINI

ZAINUDDIN CHE SOH

NOR AZHAR IBRAHIM

MOHAMMAD MASOOD AKHTAR

KHAIRUL AZLI KHALID

ALLIDA MUHAMMAD SAID

MOHD BAHRULNIZAM HJ MUSA

SAMSUDIN ABDUL HAMID

AB JALIL ALI

SIES HUSSAIN



# Meet Your Instructors

## PROF EMERITUS TJIA HONG DJIN

Tjia Hong Djin (or H.D. Tjia) is a Geological Consultant at Energy Quest Sdn Bhd with more than 52 years of experience in the upstream oil & gas industry.

As an academician, Prof Tjia lectures at several universities namely Institut Teknologi Bandung in Indonesia and a few in Malaysia i.e., Universiti Malaya, Universiti Kebangsaan Malaysia and Universiti Sains Malaysia. He authored a few university-level textbooks; one entitles Tektonik, Geomorfologi, and produced manuals on geological map constructions. Prof Tjia priceless contribution to society include relevant entries to a few world renowned encyclopedia namely the Encyclopedia Britannica (15th edition), Encyclopedia of Oceanography and Petroleum Geology and Resources of Malaysia. Recognized as the region subject matter expert in structural geology, he received a grant from the Japan Society for the Promotion of Science in 1980, to conduct a study on the active tectonics of the Japanese Islands. Having worked as a researcher at PETRONAS Research and currently a consultant geologist at Energy Quest, Prof Tjia has conducted extensive field studies throughout Malaysia and Indonesia, including a few special target expeditions in remote parts of the region.

Prof Tjia holds a Doctor of Mathematics and Natural Science degree from Institut Teknologi Bandung, Indonesia and was awarded an honorary DSC (Geology) by Universiti Kebangsaan Malaysia.

## MANSOR AHMAD

Mansor Ahmad, a Geological Consultant at Energy Quest Sdn Bhd, has almost 30 years of experience in the upstream oil & gas industry, working the Malaysian and international basins

Subsequent to having the practical geoscience exposure as an Operation Geologist for PETRONAS Carigali Sdn. Bhd. for the first five years of his career beginning 1983, Mansor later find a niche in exploration geology where he evaluates block prospectivity in determining asset value. Mansor has evaluated international regional and exploration blocks including Liadong Bay, China, West Africa and CIS. His area of expertise includes the study of sedimentology, stratigraphy (including sequence stratigraphy), palaeoenvironment, paleontology and geochemistry. A committed trainer, Mansor is a visiting lecturer with a number of local institutions including Universiti Institut Teknologi Mara and Universiti Teknologi Petronas. At Energy Quest, Mansor leads fieldworks and training sessions for geoscientists and sub-surface engineers on basement and Tertiary basins geology in Peninsular Malaysia and Sabah.

Mansor holds a Bachelor of Science in Geology from Universiti Malaya, Malaysia.

# Meet Your Instructors

## AHMAD MUNIF KORAINI

Ahmad Munif Koraini is a Biostratigraphy Consultant with more than 25 years of experience in the upstream oil & gas industry.

A lecturer for Masters of Science program in Petroleum Geology at the Universiti Kebangsaan Malaysia, Munif has proven that academic and industry experience is a winning recipe for success in one's career. In the oil and gas industry, Munif is known as an exploration geologist and a geological lab specialist. Interested in research, Munif is an expert locally and internationally in Palynology for Tertiary South East Asia, Cretaceous Dinoflagellates of North sea and East Greenland and has an extensive experience and knowledge on Nannofossil analysis for Tertiary South East Asia. Munif also studies the important petroleum geology components such as sedimentology, biostratigraphy, and geochemistry of cores and outcrops throughout Malaysia and Greenland.

Munif is a firm believer of bringing Geoscience to the field and bridging the gap between geoscience and field operations; he has conducted numerous training sessions for Petronas's technical and non-geoscience personnel.

Munif holds a Bachelor of Science in Geology from University of South Carolina, USA.

## ZAINUDDIN CHE SOH

Zainuddin Che Soh is the General Manager of Geophysics Department in Energy Quest Sdn Bhd with more than 35 years of experience in the upstream oil and gas industry.

Zain has been in the industry for the last 35 years of which 20 years was with ExxonMobil, seven years with PETRONAS, and eight years with EQ. In ExxonMobil he worked as a geophysical interpreter both in exploration and field development activities. In PETRONAS he was a geophysical consultant involved in field appraisal drillings, asset acquisitions, and coaching junior staffs. In EQ Zain has been the Head of Geophysics involving in geophysical interpretation and also asset acquisitions for various companies from all around the world. Zain has written numerous technical papers on Geophysics in Malaysia and abroad. In 1996 he won the AAPG best paper award for his paper entitled "3D interpretations for the Jerneh Gas Field, offshore Malaysia with emphasis on attribute analysis". At international level, Zain has worked in Houston under ExxonMobil from 1983 to 1986 and in Dubai under PETRONAS Carigali from 1997 to 1999. In Houston he worked the West Ranch field with application of sequence stratigraphy in looking for bypassed oil. In Dubai he was involved in the 3D seismic interpretation of Russian's Gubkin, Barinov and Livanov fields located in the Caspian Sea. In asset acquisition Zain has looked into numerous areas including the Middle East, Africa and Russia.

Zain holds a Bachelor of Science Degree in Geology from Universiti Malaya and a Diploma in Engineering from Cranfield Institute of Technology.

# Meet Your Instructors

## NOR AZHAR IBRAHIM

Nor Azhar Ibrahim is the Geophysical Consultant at Energy Quest with more than 15 years of experience in the upstream oil and gas industry.

Azhar started as a Geophysicist in PETRONAS Carigali in 1996, where he evaluated various marine site survey projects. As a Senior Geophysicist in PETRONAS Research, Azhar ventured into seismic processing before he continued at PETRONAS Technology Center (EPTC) as the Staff Geophysicist specializing in Quantitative Interpretation. He was the co-author of a few technical oral papers besides being the author for several technical posters. His publications include, "Increasing the Accuracy of Depth Conversion Using Hybrid Velocity Modeling : Case study at South Malay Basin" at 2010 Petroleum Geology Conference & Exhibition (PGCE), Kuala Lumpur, Malaysia and "Delineation of Structure Using Instantaneous Velocity Modeling – A Solution Trough Method" at the 2009 Petroleum Engineering Forum, Kuala Lumpur Convention Centre, Kuala Lumpur. At Energy Quest, Azhar focuses on geophysical interpretation in various studies in the region.

Azhar holds a Bachelor of Applied Science (Geophysics) from Universiti Sains Malaysia.

## MOHAMMAD MASOOD AKHTAR

Mohammad Masood Akhtar is the Petrophysical Consultant in Energy Quest Sdn Bhd with over 36 years of experience in the industry.

Mohammad Masood Akhtar is a professional consultant with international experience which includes 13 years of work experience with Schlumberger in their international service cadre. At Schlumberger, all kinds of Petrophysical services were provided to major national & international clients using latest SCHLUMBERGER PROPRIETARY BASELINES & SOFTWARE PACKAGES. The clients served include major oil & gas exploration companies such as BP, BG, SHELL, ENI LASMO, TULLOW OIL, OMV, UTP, BHP, OGDC, POL, PPL, OPI, OCCIDENTAL, MARI GAS, ADNOC, ADMA, ADCO, UDECO, JODCO, DPC, TOTAL, NIOC, PREMIER KUFFPEC, PETRONAS etc.

His areas of expertise include Resource Assessment Studies; Full Field Reviews (FFR); Field Development Plans (FDP); Blocks Evaluations; Data Room Reviews; Unconventional Hydrocarbon Reservoirs Evaluations; Shale Gas; Shale Oil; conventional open hole formation evaluation and modeling using wireline, LWD, MWD logs; NMR evaluations; Thin Bed evaluations, LRLC type evaluations, Integration of logs, pressures and cores data; Image Logs Petrophysics; Facies Analysis; Cased Hole and Production Logs interpretations; development of fit-for-purpose Artificial Intelligence Neural Networks (ANN) Models for the prediction of reservoirs petrophysical properties.

Masood holds a Post Graduate Diploma in Digital Technique from Philips International Institute Eindhoven, Holland and a Bachelor of Electronics Engineering from University of Engineering and Technology Lahore, Pakistan.

# Meet Your Instructors

## KHAIRUL AZLI KHALID

Intelligent, charismatic and an energetic speaker, Khairul Azli Khalid is an experienced Reservoir Engineering Consultant for Energy Quest Sdn Bhd with more than a decade experience.

Having significantly involved with both local and international projects, Khairul has proven the worthiness of his knowledge early in his career as he worked for ExxonMobil for five years with a challenging offshore field team. Specializing in field development and reservoir simulation work, Khairul takes interest in other disciplines, forever strengthening his quality of work and understanding of the constantly evolving oil and gas industry. A friendly chap, Khairul is often seen around the office, explaining theories and helping out with logical, well thought off solutions to petroleum engineering problems. The first listen to his voice will have you giving your full attention.

Khairul studied in University of Texas at Austin in the USA and holds a Bachelor of Science in Mechanical Engineering from Rensselaer Polytechnic Institute at New York in the USA and a Master in Mechanical Engineering from University Teknologi Malaysia.

## ALLIDA MUHAMMAD SAID

Allida Muhammad Said, is a Reservoir Engineering Consultant and a Petroleum Economist, at Energy Quest Sdn. Bhd. with more than twenty years' experience in the upstream oil & gas industry.

A Reservoir Engineer and a Petroleum Economist in ExxonMobil for fifteen years, she then joined the pioneering team of Energy Quest Sdn. Bhd. in developing a local company that provides upstream consultancy service. Allida has technically and commercially assessed, studied, drilled, developed, managed, surveyed and relinquished numerous oil and gas fields. She has worked the various phases of a field life, an experience critical in formulating an optimum field development plan. Allida manages both the technical and commercial aspects of a project which include locating by-passed oil in a complex field with historical production via dynamic simulation, quantifying asset value leading to block acquisition, evaluating a development plan for massive investment and maximizing profit of a marginal field development. She champions in marginal field development planning & implementation where she focuses on team integration approach. She has worked in the different areas including the basins in Iran, Bangladesh and Indonesia. Allida is also as an adjunct lecturer with the Universiti Teknologi PETRONAS (UTP) and serves as the external examiner as the industry representative for the UTP students Final Year Project.

Allida holds a Bachelor of Science in Civil Engineering from Northwestern University at Illinois in the USA.

# Meet Your Instructors

## MOHD BAHRULNIZAM HJ MUSA

Mohd Bahrulnizam Hj Musa is the Senior Reservoir Engineering Consultant at Energy Quest Sdn Bhd, with 15 years of diversified experience in reservoir engineering and upstream petroleum industry.

As a Reservoir Engineer (& Petroleum Economist) with PETRONAS Carigali Sdn Bhd PSCB for more than six (6) years where he worked in multi disciplines asset teams. He has years of operational hand-on experience, contributing to offshore drilling campaigns of Revisit Plan and Field Development Plan implementations where he made operational decisions and supervisions in ensuring the success of the campaigns. He was a core team member to the subsurface studies where he analysed reservoir, core and PVT data, historical reservoir and well performances, used simulation models for optimum formulation of the field development plan and Reservoir Management Plan (RMP), as well as contributed to facilities designs. Bahrulnizam has also coached junior engineers. He was actively involved in the subsurface surveillance and optimisation of Production Sharing Contract (PSC) assets, e.g. RMP revisions and gas lift optimisation. He was also involved in exploration data acquisition and laboratory works, responsible for Work Program & Budget (WP&B) preparations and Annual Review of Petroleum Resources (ARPR) reports. As Petroleum Economist, he has evaluated the project economics for field studies, as well as for business and operational decisions in achieving the business objectives. He was a pioneer team member of PETRONAS Upstream Organizational Performance Improvement (OPI) where the team within two (2) years has established the framework and methodology for performance gap assessment and interventions; analysed, identified performance gaps and recommended interventions for an onshore gas terminal and an offshore platform operations.

As a Senior Reservoir Engineer with White Nile (5B) Petroleum Operating Company Ltd. (WNPOC) for about 5 years where he was part of the core study teams. He supervised FDP implementations and making operational decisions for onshore viscous oil fields. He conducted dynamic reservoir simulations, analysed reservoir and well performances for production target updates, production problem diagnostics, and short term strategies. He supervised and reviewed work by third party contractors, including RCA, SCAL, PVT analyses, FDP and FFR reservoir simulation models including history matching and prediction. He prepared tender documents for PVT analyses, FDP and FFR studies contracts, evaluated bids for PVT analyses, FDP studies, ESP and PCP, and sand screen contracts. He was also involved in preparing conceptual field and areal development plans for corporate planning, exploration data acquisition and laboratory plans. Bahrulnizam also coached and supervised national engineers.

Bahrulnizam holds a Master of Engineering in Petroleum Engineering from Imperial College of Science, Technology & Medicine, University of London, United Kingdom. He is an Associate of Royal School of Mines.

## SAMSUDIN ABDUL HAMID

Samsudin Abdul Hamid, a Geological Consultant at Energy Quest Sdn Bhd, has almost 30 years of experience as an Exploration Geologist, in the upstream oil & gas industry.

A versatile geoscientist, Samsudin conducts both geological and geophysical evaluations in determining asset value. He specializes in block exploration and asset acquisition and has worked the African basin besides the Malaysian and Indonesian basins. Samsudin also mentors the young professionals at Energy Quest.

Samsudin holds a Bachelor of Science in Geology from Universiti Malaya, Malaysia.

# Meet Your Instructors

## AB JALIL ALI

Ab Jalil Ali is the Head of Business Development and Petroleum Economics Department in Energy Quest Sdn Bhd with over 20 years of experience in oil and gas industry.

In his early years career at Carigali Baram Delta Operations, he rose through positions including two years stint offshore as Wellsite Petroleum Engineer working on various type of drilling rigs and a few years office based as Production Chemist and Technologist. Immediately after acquiring his MBA, he focused more on commercial tasks in Carigali block valuations and field development economics for both domestic and international. He was instrumental orchestrating Carigali migration of all her economic models from spreadsheet to Merak PEEP. Having responsible for PEEP modeling, regional road shows and user trainings, his work in decentralizing and standardizing project evaluation system produced stable, highly available support from non-economists. In 1998 with a focus on strategic solutions analysis to further business goal, he decided to join PETRONAS Petroleum Management Unit (PMU) as Senior Asset Planner and two (2) years later took up position of Senior Business Planner during the difficult period of low oil price. Always rise to new challenges, he left his PETRONAS comfort zone and joined Amerada HESS commercial team and exposed himself for the first time to 'Thailand royalty and tax petroleum arrangement. He managed HESS's Thailand Pailin producing gas asset cashflow and an analyst for Phu Horm gas field development. He held the position of Senior Managing Consultant for Halliburton in 2005, where he was tasked to shepherd sales and client user trainings for economic ARIES and drilling WELLPlan softwares. In 2007 he moved to British Gas (BG) Singapore, where he was appointed as a Lead Analyst managing BG Genting Sanyen power plant cashflow and played a fundamental role in BG LNG venture in coal-bed methane upstream project in Queensland, Australia and also in BG Indonesia country entry.

Jalil holds a Bachelor of Science in Chemical Engineering from Tulsa University, Oklahoma, USA and MBA from University of La Trobe, Bundoora, Melbourne, Australia.

## SIES HUSSAIN

Sies Hussain is a Technical Advisor at Energy Quest Sdn.Bhd. specializing in production technology with 30 years' experience in the upstream oil & gas industry.

Prior to joining Energy Quest, Sies worked at ExxonMobil for almost thirty years where half of that period, has been spent on gas lift optimization. Sies operational experience include designing and commissioning field gas lift system, providing field operating support in production optimization effort and providing gas lift training for engineers and operating personnel. His specialty includes sand control and management where he has designed and installed the first gravel pack in ExxonMobil for an unconsolidated gas reservoir. He has participated in the international gas lift forum such as ASME/ISO workshops and reviewed ISO standard on dual gas lift design. He has published SPE papers on "Gas Lift Optimization efforts and Challenges- SPE 1998" and "Sand Management Challenges in the South China Sea- SPE 2008".

Sies holds a Bachelor of Science in Chemical Engineering from Imperial College of Science and Technology, London.





**PLEASE REGISTER ME IN THE COURSE:**

Course Title : \_\_\_\_\_  
Course Code : \_\_\_\_\_ Course Date : \_\_\_\_\_

**DELEGATE 1**

First Name : \_\_\_\_\_ Last Name : \_\_\_\_\_  
Designation : \_\_\_\_\_ Email : \_\_\_\_\_

**DELEGATE 2**

First Name : \_\_\_\_\_ Last Name : \_\_\_\_\_  
Designation : \_\_\_\_\_ Email : \_\_\_\_\_

**DELEGATE 3**

First Name : \_\_\_\_\_ Last Name : \_\_\_\_\_  
Designation : \_\_\_\_\_ Email : \_\_\_\_\_

**CONTACT PERSON**

First Name : \_\_\_\_\_ Last Name : \_\_\_\_\_  
Designation : \_\_\_\_\_ Email : \_\_\_\_\_  
Company Address : \_\_\_\_\_  
Telephone No : \_\_\_\_\_ Fax No : \_\_\_\_\_

**REGISTRATION**

Please complete and return this form to ENERGY QUEST SDN BHD for reservation.

**PAYMENT METHOD**

By Cheque / Bank Draft

- Make payable to ENERGY QUEST SDN BHD

Bank Transfer

- MAYBANK Account No: 5143 5672 2789

**PAYMENT POLICY**

Registration will not be confirmed until full payment is received. Fees must be paid prior to the first day of the course. Early bird registrations are entitled for 4% discount while group booking (3 or more) is entitled for 5% discount.

**CANCELLATION & SUBSTITUTION**

You may substitute delegates at any time. No refunds will be available for cancellations.

- For cancellations received in writing more than 10 days prior to the course start date; 100% credit will be given to be used at another ENERGYQUEST training course any time within ONE year from the issuance date.
- For cancellations received 10 days or less prior to the course date, no credits will be issued.

For further details, please contact us at:

ENERGY QUEST SDN BHD

Suite 7.01A & 7.01B, 7th Floor,

Menara KH, Jalan Sultan Ismail, 50250 Kuala Lumpur.

Email: [training@energyquest.com.my](mailto:training@energyquest.com.my)

Tel: 603 2143 4228 Fax: 603 2142 4229

Code	Field Trip Title	Duration	Date	Fee (MYR)	(X)
FT101	Structural Geology: Langkawi Islands & Perlis	3 days	4-6 Mar 2013	10,125	
FT105	Geology for Petroleum Engineers: Kuala Lumpur	1 day	7 Mar 2013	3,750	
GL101	Fundamentals of Petroleum Geology	5 days	18-22 Mar 2013	14,600	
FT107	Geology of Western Belt of Peninsular Malaysia: Kuala Lumpur-Langkawi	3 days	8-10 Apr 2013	10,125	
FT201	Geology of Northern Sabah: Sabah	5 days	22-26 Apr 2013	15,000	
FT106	Field Techniques of Structures in 'Hard Rock': Pahang-Terengganu	3 days	6-8 May 2013	10,125	
GL101	Fundamentals of Petroleum Geology	5 days	13-17 May 2013	14,600	
FT103	Structural Geology: Selangor-Pahang- Negeri Sembilan-Southwest Kelantan	3 days	10-12 June 2013	10,125	
FT202	Geology of Tinjar Province: Sarawak	5 days	17-21 June 2013	15,000	
FT109	Fractured Basement: Redang Island	3 days	4-6 Sept 2013	12,727	
FT108	Fractured Basement: Pahang-Terengganu-Johor	3 days	23-25 Sept 2013	12,727	
FT104	Fundamentals of Petroleum Geology: Pahang	3 days	25-27 Nov 2013	12,727	
FT102	Sedimentology: Pahang	3 days	9-11 Dec 2013	12,727	
FT105	Geology for Petroleum Engineers: Kuala Lumpur	1 day	16 Dec 2013	3,750	

**DISCLAIMER:**

- (\*) Two (2) days classroom and three (3) days field trip
- Course fees are inclusive of daily transportations for field visits and meals for the whole trip.
- Course fees are exclusive of air ticket (if required) and accommodations. Please contact ENERGY QUEST should you require assistance for the arrangements. Arrangements can be done by ENERGY QUEST and 5% service fees are applicable.
- Course fees are confirmed at the time of publishing. Should there be any significant price changes, ENERGY QUEST reserves the right to charge additional fees.
- Participants are required to fill up the consent form that will be provided upon confirmation.
- Participants are advised to purchase necessary insurance before travelling.
- ENERGY QUEST reserves the right to alter or modify the programs.
- Confirmations are required two (2) weeks before the course date to avoid premature cancellation.

Code	Course Title	Duration	Date	Fee (MYR)	(X)
<b>MARCH</b>					
GL104	Introduction to Biostratigraphy	1 day	5 Mar 2013	3,000	
PE104	Introduction to Enhanced Oil Recovery	1 day	5 Mar 2013	3,000	
EC201	Introduction to Petroleum Economics	1 day	18 Mar 2013	3,000	
EC301	Overview of Petroleum Arrangement	2 days	19-20 Mar 2013	5,700	
EC401	Upstream Project Economics Modeling	2 days	21-22 Mar 2013	5,700	
GPI01	Seismic Acquisition & Processing	1 day	25 Mar 2013	3,000	
PE101	Laboratory Analysis: Overview of Rock & Fluid Analysis	1 day	25 Mar 2013	3,000	
GPI02	Seismic Inversion	1 day	26 Mar 2013	3,000	
PE103	Oil & Gas Reserves	1 day	26 Mar 2013	3,000	
GP201	Seismic Interpretation	2 days	27-28 Mar 2013	5,700	
PE205	Reservoir Simulation	1 day	27 Mar 2013	3,000	
PE206	Reservoir Management Plan	1 day	28 Mar 2013	3,000	
<b>APRIL</b>					
GL105	Oil & Gas Exploration Tools	1 day	1 Apr 2013	3,000	
PE201	Integrated Approach in the Formulation of a Field Development Plan	1 day	1 Apr 2013	3,000	
GL103	Mapping Techniques, Volumetric Assessment & Risk Uncertainties	1 day	2 Apr 2013	3,000	
PE102	Reservoir Engineering for Geoscientists	1 day	2 Apr 2013	3,000	
PE207	Gas Lift Optimization	3 days	15-17 Apr 2013	8,100	
GL301	Plate Tectonics & Regional Geology of Southeast Asia	3 days	15-17 Apr 2013	8,100	
GL201	Fundamentals of Sequence Stratigraphy	2 days	22-23 Apr 2013	5,700	
FE201	Log Interpretation	2 days	22-23 Apr 2013	5,700	
<b>MAY</b>					
GPI01	Seismic Acquisition & Processing	1 day	13 May 2013	3,000	
PE101	Laboratory Analysis: Overview of Rock & Fluid Analysis	1 day	13 May 2013	3,000	
GPI02	Seismic Inversion	1 day	14 May 2013	3,000	
PE103	Oil & Gas Reserves	1 day	14 May 2013	3,000	
GP201	Seismic Interpretation	2 days	15-16 May 2013	5,700	
PE205	Reservoir Simulation	1 day	15 May 2013	3,000	
PE206	Reservoir Management Plan	1 day	16 May 2013	3,000	
<b>JUNE</b>					
GL102	Structural Geology in Hydrocarbon Exploration	3 days	4-6 June 2013	8,100	
PE202	Practical RE: Basic Rock & SCAL	1 day	4 June 2013	3,000	
PE203	Practical RE: Basic PVT & Fluid Analysis	1 day	5 June 2013	3,000	
PE204	Practical RE: Pressure Transient Analysis & Well Modeling Concept	1 day	6 June 2013	3,000	
GL104	Introduction to Biostratigraphy	1 day	17 June 2013	3,000	
PE104	Introduction to Enhanced Oil Recovery	1 day	17 June 2013	3,000	
EC201	Introduction to Petroleum Economics	1 day	24 June 2013	3,000	
EC301	Overview of Petroleum Arrangement	2 days	25-26 June 2013	5,700	
EC401	Upstream Project Economics Modeling	2 days	27-28 June 2013	5,700	



Code	Course Title	Duration	Date	Fee (MYR)	(X)
<b>SEPTEMBER</b>					
GL104	Introduction to Biostratigraphy	1 day	2 Sept 2013	3,000	
PE104	Introduction to Enhanced Oil Recovery	1 day	2 Sept 2013	3,000	
GL201	Fundamentals of Sequence Stratigraphy	2 days	9-10 Sept 2013	5,700	
FE201	Log Interpretation	2 days	9-10 Sept 2013	5,700	
GL105	Oil & Gas Exploration Tools	1 day	12 Sept 2013	3,000	
PE201	Integrated Approach in the Formulation of a Field Development Plan	1 day	12 Sept 2013	3,000	
GL103	Mapping Techniques, Volumetric Assessment & Risk Uncertainties	1 day	23 Sept 2013	3,000	
PE102	Reservoir Engineering for Geoscientists	1 day	23 Sept 2013	3,000	
GL102	Structural Geology in Hydrocarbon Exploration	3 days	24-26 Sept 2013	8,100	
PE202	Practical RE: Basic Rock & SCAL	1 day	24 Sept 2013	3,000	
PE203	Practical RE: Basic PVT & Fluid Analysis	1 day	25 Sept 2013	3,000	
PE204	Practical RE: Pressure Transient Analysis & Well Modeling Concept	1 day	26 Sept 2013	3,000	
EC201	Introduction to Petroleum Economics	1 day	30 Sept 2013	3,000	
<b>OCTOBER</b>					
EC301	Overview of Petroleum Arrangement	2 days	1-2 Oct 2013	5,700	
EC401	Upstream Project Economics Modeling	2 days	3-4 Oct 2013	5,700	
GL301	Plate Tectonics & Regional Geology of Southeast Asia	3 days	7-9 Oct 2013	8,100	
PE207	Gas Lift Optimization	3 days	7-9 Oct 2013	8,100	
GPI01	Seismic Acquisition & Processing	1 day	21 Oct 2013	3,000	
GPI02	Seismic Inversion	1 day	21 Oct 2013	3,000	
PE101	Laboratory Analysis: Overview of Rock & Fluid Analysis	1 day	22 Oct 2013	3,000	
PE103	Oil & Gas Reserves	1 day	22 Oct 2013	3,000	
GP201	Seismic Interpretation	2 days	23-24 Oct 2013	5,700	
PE205	Reservoir Simulation	1 day	23 Oct 2013	3,000	
PE206	Reservoir Management Plan	1 day	24 Oct 2013	3,000	
<b>NOVEMBER</b>					
GL105	Oil & Gas Exploration Tools	1 day	11 Nov 2013	3,000	
PE201	Integrated Approach in the Formulation of a Field Development Plan	1 day	11 Nov 2013	3,000	
GPI01	Seismic Acquisition & Processing	1 day	12 Nov 2013	3,000	
PE101	Laboratory Analysis: Overview of Rock & Fluid Analysis	1 day	12 Nov 2013	3,000	
GPI02	Seismic Inversion	1 day	13 Nov 2013	3,000	
PE103	Oil & Gas Reserves	1 day	13 Nov 2013	3,000	
GP201	Seismic Interpretation	2 days	18-19 Nov 2013	5,700	
PE205	Reservoir Simulation	1 day	18 Nov 2013	3,000	
PE206	Reservoir Management Plan	1 day	19 Nov 2013	3,000	
GL104	Introduction to Biostratigraphy	1 day	20 Nov 2013	3,000	
PE104	Introduction to Enhanced Oil Recovery	1 day	20 Nov 2013	3,000	

Code	Course Title	Duration	Date	Fee (MYR)	(X)
<b>DECEMBER</b>					
GL103	Mapping Techniques, Volumetric Assessment & Risk Uncertainties	1 day	2 Dec 2013	3,000	
PE102	Reservoir Engineering for Geoscientists	1 day	2 Dec 2013	3,000	
GL102	Structural Geology in Hydrocarbon Exploration	3 days	3-5 Dec 2013	8,100	
PE202	Practical RE: Basic Rock & SCAL	1 day	3 Dec 2013	3,000	
PE203	Practical RE: Basic PVT & Fluid Analysis	1 day	4 Dec 2013	3,000	
PE204	Practical RE: Pressure Transient Analysis & Well Modeling Concept	1 day	5 Dec 2013	3,000	
EC201	Introduction to Petroleum Economics	1 day	9 Dec 2013	3,000	
EC301	Overview of Petroleum Arrangement	2 days	10-11 Dec 2013	5,700	
EC401	Upstream Project Economics Modeling	2 days	12-13 Dec 2013	5,700	

**DISCLAIMER:**

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**ENERGY QUEST SDN BHD**, Suite 7.01A & 7.01B, 7<sup>th</sup> Floor, Menara KH, Jalan Sultan Ismail, 50250 Kuala Lumpur, Malaysia.  
**Email:** [training@energyquest.com.my](mailto:training@energyquest.com.my) **Website:** [www.energyquest.com.my](http://www.energyquest.com.my) **Tel:** 603 2143 4228 **Fax:** 603 2142 4229