



**Reservoir Simulation, Modelling & Optimization  
Module 1 & 2  
PEP01**



**Oil & Gas  
Consultancy Services & Technical Training Providers**

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# **Reservoir Simulation, Modelling & Optimization**

## **Module 1 & 2**

### **(PEP01)**

#### **Course Description:**

This program has to do with calculations involving the mechanics of reservoir volume estimation and how to use sub-surface formation reservoir fluids volume to efficiently design and forecast production. This is intended for Proper management of the reservoir asset without forcing unnecessary damage to the formation and without jeopardizing full exploitation of the reservoir potentials. This course will focus on the application of knowledge of reservoir characteristics to numerical modelling including single and full field models. It is a program with loads of calculations and simulation of various reservoir conditions including the use of history matching to carry out future performance predictions.

#### **Module 1:**

##### **Course Contents:**

1. Overview of Basic Reservoir Engineering Concepts
2. Reservoir Simulation Deliverables
3. Types of reservoir models
4. Reservoir drive mechanisms
5. Reservoir Simulation Principles and Theories
  - Conservation of Mass
  - Fluid Phase flow Behaviour
6. Reservoir Simulation Inputs and Data Requirements
  - PVT Data
  - Relative Permeability
  - Capillary pressure

## Module 2:

7. Gridding Considerations
8. Transmissibility's
9. History Matching
10. Field Management
  - Enhanced recovery techniques
11. Hydrocarbon production Predictions
  - Reserves Estimation
  - Mature field Management
12. Uncertainty evaluation

### Who Should Attend?

- Petroleum Engineers
- Geologists, Geophysicists
- Petrophysicists
- Chemicals Engineers

### Venue:

Please visit our website or contact us for details.

### Tuition:

Module 1: £3,150 +VAT

Module 2: £3,150 +VAT

5 easy ways to  
register or to  
make an enquiry:

1.Web

[www.petroconsultenergy.co.uk](http://www.petroconsultenergy.co.uk)

2.Email

[info@petroconsultenergy.co.uk](mailto:info@petroconsultenergy.co.uk)

3.Phone

+44(0)1708 755355

4.Fax

+44(0)1708 755358

5.By post

*Petroconsult Energy Co. Ltd.*

4 Holgate Court, Western Road,

Romford. RM1 3JS, United Kingdom