

Advanced Integrated Production Modelling Course 5 Day Course

Target Audience:

This course is targeted to those engineers that have (i) attended the *Standard IPM* course previously, and (ii) have consolidated their familiarity of *MBAL*, *PROSPER* and *GAP* through consistent use over time.

This course will assume a base level of familiarity of the tools, and is intended promote the analytical features available in creating physics based field realisations in the **IPM** tools.

Specific Objectives

- 1. Developing advanced dexterity skills in using the **IPM** suite of programs
- 2. Understanding the phenomenon, and how the methods in the tools describe the phenomenon.
- 3. Understanding the physics phenomena and limitations of the mathematical description

Course Agenda:

Day 1

GAP / PROSPER / MBAL

Integrated Production Modelling Review Water Cut and GOR Predictions Building History Matched Reservoir Models

Day 2

GAP / PROSPER

Building a History Matched **IPM** Model VLP Matching with Multiple Well Tests Ensuring Consistency between Network and Well Models Optimum Pipeline Configuration and Production Optimisation

Day 3

MBAL/ OpenServer & Workflows

Reservoir case studies using **MBAL**: using advanced matching strategies to achieve a history matched Reservoir.

Using **OpenServer** to automate tasks in **PROSPER**, **GAP** and then migrating to Visual Workflows in RESOLVE.

Day 4

PVTp

Characterising an EOS starting with a fluid (Oil) PVT report BO Validation using an Equation of state (EoS) Characterising an EOS starting with a near critical fluid (condensate) PVT report

Day 5

MBAL, PROSPER & GAP

Powderhall Retrograde Condensate Workshop Building a full field integrated model for a 4 reservoir / 5 wells field and analysing different field management options (Flow Assurance)