



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 phenomena, and how the methods in the tools describe the phenomena
3. Understanding the physics phenomena and limitations of the mathematical description

Course Agenda:

Day 1

PROSPER / MBAL

Integrated Production Modelling review

Building and calibrating well models - VLP matching with multiple well tests

Building and history matching a reservoir model

Day 2

GAP / RESOLVE

*Building and calibrating **IPM** model (reservoirs, wells and surface network)*

Production optimisation

Reservoir simulator integration

Implementation of field management rules

Scenarios management

Day 3

MBAL/ OpenServer & RESOLVE

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

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

Day 4

PVTp

Characterising an equation of state (EOS) starting with a fluid (Oil) PVT report

Black Oil validation using an EOS

Day 5

IPM Suite

Retrograde Condensate Workshop

Building a full field integrated model for a 2 reservoir / 3 wells field and analysing different field management options (flow assurance)