

Stage 2: Basic Short Course — Advanced Well Engineering (2Days)

About the course:

The course focuses on the concept of effective well construction, and aims to develop high levels of professional skill in the key areas of well design, drilling and operations management.



Who Should Attend?

Typical students include those working in oil and gas companies, energy companies, national oil companies, engineering firms and project service companies. Graduates of MSc Drilling and Well Engineering are now employed in every oil producing area of the world and work for many of the oil majors and drilling contractors.

Aims of Module:

This module focuses on the application of engineering practices to optimize and deliver enhanced productivity.

Indicative Module Content:

1. High Pressure / High Temperature wells

Techniques and Equipment

2. Deepwater

Techniques and considerations

3. Underbalanced and TTRD

Theory and practice

4. Extended Reach, Multilateral and Designer

Design considerations
Technology

5. Workover, Intervention and Well Management

Techniques
Productivity Issues
Technology

6. QRA based well programming

7. Advanced Wells

Drilling Equipment
Completion Equipment
Intelligent Wells
Material Selection

Why Attend?

On completion of this module, students are expected to be able to:

1. Design a strategy for optimizing a mature asset using and justifying appropriate advanced drilling technologies.
2. Use a range of intervention techniques and well monitoring technologies to optimize well uptime.
3. Construct an example of QRA based well programming.
4. Produce a conceptual design for a deepwater well.

