



# Introduction to Drilling

**Designed for:**

All those involved in well related activities, specifically petroleum engineers and geoscientists who contribute to well proposals or those who may need a deeper understanding of well design and construction to make more informed decisions in their work.

**Duration**  
(days)



**Learning Level:**



Introduction to Drilling is a course designed to impart a comprehensive understanding of how and why wells are constructed the way they are.



The course considers the issues around both drilling to the reservoir safely and efficiently, and drilling through the reservoir where the emphasis is on maximising well productivity.

The course uses a standard drilling programme as a ‘red-thread’ on which to hang detailed discussions about site preparation, drilling operations, casing design, mud and cement selection, and data collection. All the subjects are supported and reinforced by numerical examples.

The course contains a mixture of formal teaching, individual and group exercises, videos, posters and (customs allowing) a number of exhibits.

Informal discussions of local issues will be covered.

## Introduction to Drilling continued

---

### Course Content:

The course covers all aspects of well construction operations including:

Overview of well types and drilling programmes

- Exploration, appraisal and development wells
- Typical programmes and information requirements

Drilling sites

- Site selection and preparation
- Site management and life of field considerations
- Spudding a well

Drilling 'to' the Reservoir

- Well path design and deviation surveys
- Bit type and BHA design
- Drilling fluids selection and management
- Casing selection and design
- Cementing operations
- Leak off testing

Drilling 'through' the Reservoir

- Well productivity prediction and estimation
- Formation damage causes and prevention
- Data acquisition management
- Pre-completion design and installation
- Completion selection and design

Measuring the success of Drilling operations

- Well integrity assessment
- Well productivity measurement

### Course Duration:

Duration is 5 days.

### Courses available from this series:

Drilling Awareness  
Introduction to Drilling  
Well Productivity Awareness School (WASP)  
Completion Design  
Completion Practices  
Well Management  
Tubing Stress Analysis  
Artificial Lift  
HPHT Drilling  
Integrated Well Planning & Drilling Operations  
Operations Geology  
Maximising Well Productivity in a Low Oil Price World  
Stuck Pipe Prevention  
Well Integrity Management

### Course Tutor



**Angelique Robb** BSc

**Main Series tutoring:** Wells

**Industry experience:** over 16 years, petroleum engineering

**Career background:** BP, Shell, Britannia, Marathon Oil, Chevron, Oilexco, Leap Energy and AGR

**Personal:** Black belt in Business Improvement

---

TRACS International Limited  
East Wing First Floor, Admiral Court  
Poyrnook Road, Aberdeen, AB11 5QX  
Tel: +44 (0)1224 024074

**Contact**  
[training@tracs.com](mailto:training@tracs.com)