



## Drilling Engineering – Skill Cementing Operations -

### **Course Description**

The course covers aspects of primary, squeeze and plug cementing, and primary cementing calculations. Cement chemistry is introduced to understand the process involved in achieving a satisfactory cement job. Additives used to affect various properties of the slurry and set cement are addressed. Rheological models used during cement job design and requirements for effective mud removal will be covered. Cementing aids and job quality evaluation methods are discussed.

### **Audience**

Drilling professionals with some understanding of the drilling process.

### **Prerequisites**

Basic knowledge of the oil & gas industry. Some understanding of cement use is strongly recommended. Participants will need to provide a hand calculator and be prepared to perform exercises in class.

### **Course Schedule**

**1** Primary Cementing Overview & Calculation  
Cement Chemistry

**2** Cement Laboratory Equipment  
Rheology  
Cement Additives

**3** Mud Removal  
Gas Migration Control  
Cementing Temperature

**4** Squeeze Cementing  
Cementing Plugs

**5** Introduction and review of cementing design and evaluation software  
Special purpose cements