Course Name

GC9. Drilling Hydraulics

Duration

Five (5) days

Objectives

This course is designed to provide the participants with the advanced knowledge needed to design and analyze drilling hydraulics. The participants will learn hydrostatics of single and multiphase systems; fundamentals of drilling fluid rheology; calculating frictional pressure losses in the circulating system; optimizing bit hydraulics; evaluating hole cleaning performance; and predicting swab/surge pressure changes. The theory given in the class will also be complemented with practical examples.

Content

- Hydrostatics of Drilling Fluids
- Drilling Fluid Rheology
- Hydraulics Models
- Bit Hydraulics
- Hole Cleaning
- Swab/Surge Pressures
- Hydraulics Optimization

Prerequisites

Basic knowledge of drilling, drilling fluids and well construction.

Audience

Drilling and drilling fluid engineers, superintendents and supervisors, and all professionals involved in well planning and operation.