

This course can be adapted to virtual classroom mode

## Petrotechnical Data Management - G&G Data

5 days  
Overview

DMPETRO-EN-A

### LEVEL

Awareness

### PURPOSE

This course proposes an overview of geoscientific Data Management (DM) specifically regarding the subsurface domain. It provides in a practical and effective way, an understanding of DM principles and concepts, as well as methods and tools necessary to participate in structured DM workflow.

### LEARNING OBJECTIVES

Upon completion of the course, participants will be able to:

- describe data management and understand data as an asset,
- describe data life-cycle, the benefits of good data management and its potential value,
- describe the core data types in the E&P industry and the corresponding best practices,
- discuss common data management issues and challenges,
- discuss and manipulate the important components of a data management framework,
- describe how to map issues with a data management framework.

### WAYS AND MEANS

Interactive presentations and document analysis.

### LEARNING ASSESSMENT

Knowledge assessment with multiple-choice questions.

### PREREQUISITES

Degree holder in a technical field (ideally G &G), with basic geoscience knowledge.

## Agenda

### INTRODUCTION TO DATA MANAGEMENT

0.5 d

Introduction to information management.  
Data types: definitions.  
Common Data Management issues.  
Geo-referenced data: geodesy, topometry, cartography and Geographic Information System (GIS).

### DATA MANAGEMENT METHODS

1 d

Data Management best practices, business impact.  
Overview of Data Management: definitions.  
Data life-cycle: from inception to destruction (planning, implementation and control activities).

### THE VALUE OF DATA & DATA MANAGEMENT

0.5 d

Benefits of good Data Management.  
Business case aspects and barriers.

Data governance: strategy, organization, policies and standards, projects and issues.

Data Management architecture: modeling, technology and tools.

Data Management framework, governance, architecture, security.

Difference between reference and Master Data Management.

Data quality management: definition and dimensions of data quality (accuracy, currency, coverage, relevance, accessibility and comparability).

Data quality tools and capabilities.

## GEOSCIENTIFIC DATA MANAGEMENT

1.5 d

Seismic data.

Borehole data (drilling report, logs and cores).

Well data (production data, well test, workovers).

Fluid data: PVT tests and reports.

## PROJECT DATA MANAGEMENT

1 d

Project data base construction.

Sharing projects:

Geomodeling.

Material balance model.

Reservoir simulation model.

## INTEGRATION MANAGEMENT SERVICE

0.5 d

How integration happens in the real world.

Data integration challenges.