

# ***GEOSCIENCES TRAINING COURSES***

# GEOSCIENCES COURSES CATALOGUE

## CONTENTS

<b>INTRODUCTION .....</b>	<b>3</b>
<b>GEOSCIENCES COURSES .....</b>	<b>5</b>
GEOLOGY .....	5
RESERVOIR ENGINEERING .....	6
RESERVOIR GEOLOGY.....	8
GEOPHYSICS.....	9
PETROPHYSICS .....	9
INTERPRETATION SOFTWARE .....	10

## INTRODUCTION

DRILNET is specialized in the technology transfer in the petroleum and para petroleum sector. Our expertise covers all sectors of the oil industry: Oil, Gas and Energy Project Management, Exploration, Production, Development, Refining and Logistics, but also Safety, Maintenance and Management.

Training is the first activity of our company, that has been accredited since 2000 by the French competent bodies as a training center under the number 93 13 0999613. Thus, we are entitled to offer training services: training engineering (training needs audit, training programs creation, manual editing), conventional training presentation (in premises and on site), coaching (on-the-job training), blended learning and e-learning. In addition to this, DRILNET offers the possibility to train your future trainers.

We are recognized worldwide as an expert in this field, as we train the personnel of the biggest international petroleum companies. DRILNET develops drilling training programs and trains engineers and technicians of international companies such as ADCO (UAE), BOUMERDES UNIVERSITY (Algeria), COFOR (France), DELTAWELL (Italy), DIETSMANN (Monaco), DRILLMEC (Iraq, Italy), ENI and ENI CORPORATE UNIVERSITY (UAE, Malaysia, Kazakhstan, Iraq, Italy), FORASOL (France), GAZ DE FRANCE (France), GSP (Romania), GTSC (UAE), HALLIBURTON (Algeria), OMV-PETROM (Romania), PRIDE (France, Kazakhstan), POLITECHNICO (Italy), RST GLOBAL SOLUTIONS (Singapore, Netherlands, UAE), SCHLUMBERGER (France, UK, Algeria), SONATRACH (Algeria), TNK-BP ROSNEFT (Russia), TOTAL (France, Syria) and others.

Through our partnerships and associations we provide all existing certifications: **American Safety & Health Institute, AWS, Chartered Institute of Environmental Health, Crane Certification Association of America, Croix Rouge Internationale, Emergency First Response, IADC, IASST, IMI Awards, IOSH Managing Safety, LEEA, MCA, National Safety Council, NEBOSH, NFPA, OPITO, STCW 95, UK Spill, etc.**

DRILNET is a proud Member of the **Society of Petroleum Engineers**, the **International Well Control Forum** and also the **Romanian Association of Drilling Contractors**.

The training catalogue represents an assembly of technical guide sheets. The durations and the subjects introduced can be adapted in accordance with the context and the objectives of the client.

Depending on your needs, you can choose a course in our training catalogue, and we propose to help you to adapt it in accordance with your objectives and your means.

Since 2009 DRILNET has offered several new training disciplines resulting from the partnership with other training centers.

New areas of training available through our offer in Geosciences Training Courses lean on the experience in this field of our partner that provides expertise to major oil companies worldwide as TOTAL, PERENCO, SHELL, ELF, EXXON, etc. developing an important data centre to provide a relevant response to Clients' needs.

Among the training courses offered:

- Geology
- Reservoir geology
- Reservoir Engineering
- Geophysics
- Petrophysics
- Interpretation software

The following tables list some items of our training courses.

Note that all training courses on basic level could be presented as Introductory Courses in 3 days (instead 5 days for basic course).

Also all the courses here bellow or other disciplines the client may require could be adapted and developed as upgrading advanced training course to answer the clients' specific needs. The duration of such training course could vary from 1 to several weeks or planned out over a period.

In addition to the courses listed hereafter, we propose general training programs. You can obtain the related catalogue upon request.

## GEOSCIENCES COURSES

GEOLOGY				
Course Title	Who should attend	Level		Duration
<b>Introduction To Petroleum Geology</b>	<ul style="list-style-type: none"> <li>• Drilling Engineer / Superintendent / Supervisor</li> </ul>	Basic	x	5 days
<b>Basic Petroleum Geology</b>	<ul style="list-style-type: none"> <li>• Drilling Engineer / Superintendent / Supervisor</li> </ul>	Basic	x	5 days
<b>Well Site Geology</b>	<ul style="list-style-type: none"> <li>• Drilling Engineer / Superintendent / Supervisor</li> </ul>	Basic	x	5 days
	<ul style="list-style-type: none"> <li>• Reservoir &amp; Production Engineer / Geologist / Completion Engineer</li> </ul>	Advanced	x	10 days
<b>Quantitative Well Geology</b>	<ul style="list-style-type: none"> <li>• Drilling Engineer / Superintendent / Supervisor</li> </ul>	Basic	x	5 days
	<ul style="list-style-type: none"> <li>• Reservoir &amp; Production Engineer / Geologist / Completion Engineer</li> </ul>	Advanced	x	10 days
<b>Geochemistry</b>	<ul style="list-style-type: none"> <li>• Drilling Engineer / Superintendent / Supervisor</li> </ul>	Basic	x	5 days
	<ul style="list-style-type: none"> <li>• Reservoir &amp; Production Engineer / Geologist / Completion Engineer</li> </ul>	Advanced	x	10 days
<b>Carbonate Reservoirs Geology</b>	<ul style="list-style-type: none"> <li>• Drilling Engineer / Superintendent / Supervisor</li> </ul>	Basic	x	5 days
	<ul style="list-style-type: none"> <li>• Reservoir &amp; Production Engineer / Geologist / Completion Engineer</li> </ul>	Advanced	x	10 days
<b>Structural Styles In Petroleum Exploration</b>	<ul style="list-style-type: none"> <li>• Drilling Engineer / Superintendent / Supervisor</li> </ul>	Basic	x	5 days
	<ul style="list-style-type: none"> <li>• Reservoir &amp; Production Engineer / Geologist / Completion Engineer</li> </ul>	Advanced	x	10 days
<b>Compressional and Transpressional Structural Styles Analysis</b>	<ul style="list-style-type: none"> <li>• Drilling Engineer / Superintendent / Supervisor</li> </ul>	Basic	x	5 days
	<ul style="list-style-type: none"> <li>• Reservoir &amp; Production Engineer / Geologist / Completion Engineer</li> </ul>	Advanced	x	10 days
<b>Deep Water Turbidite Depositional Structural Styles Geology</b>	<ul style="list-style-type: none"> <li>• Drilling Engineer / Superintendent / Supervisor</li> </ul>	Basic	x	5 days
	<ul style="list-style-type: none"> <li>• Reservoir &amp; Production Engineer / Geologist / Completion Engineer</li> </ul>	Advanced	x	10 days
<b>Development Geology</b>	<ul style="list-style-type: none"> <li>• Drilling Engineer / Superintendent / Supervisor</li> </ul>	Basic	x	5 days

GEOLOGY				
Course Title	Who should attend	Level		Duration
	<ul style="list-style-type: none"> <li>Reservoir &amp; Production Engineer / Geologist / Completion Engineer</li> </ul>	Advanced	x	10 days
Mapping Subsurface Structures	<ul style="list-style-type: none"> <li>Drilling Engineer / Superintendent / Supervisor</li> </ul>	Basic	x	5 days
	<ul style="list-style-type: none"> <li>Reservoir &amp; Production Engineer / Geologist / Completion Engineer</li> </ul>	Advanced	x	10 days
Operations Geology (Mud Logging)	<ul style="list-style-type: none"> <li>Drilling Engineer / Superintendent / Supervisor</li> </ul>	Basic	x	5 days
	<ul style="list-style-type: none"> <li>Reservoir &amp; Production Engineer / Geologist / Completion Engineer</li> </ul>	Advanced	x	10 days
Production Geology For Other Disciplines	<ul style="list-style-type: none"> <li>Drilling Engineer / Superintendent / Supervisor</li> </ul>	Basic	x	5 days
	<ul style="list-style-type: none"> <li>Reservoir &amp; Production Engineer / Geologist / Completion Engineer</li> </ul>	Advanced	x	10 days
Sandstone Reservoirs	<ul style="list-style-type: none"> <li>Drilling Engineer / Superintendent / Supervisor</li> </ul>	Basic	x	5 days
	<ul style="list-style-type: none"> <li>Reservoir &amp; Production Engineer / Geologist / Completion Engineer</li> </ul>	Advanced	x	10 days

RESERVOIR ENGINEERING				
Course Title	Who should attend	Level		Duration
Introduction to Reservoir engineering	<ul style="list-style-type: none"> <li>Drilling Engineer / Superintendent / Supervisor</li> </ul>	Basic	x	5 days
Basic Reservoir simulation	<ul style="list-style-type: none"> <li>Drilling Engineer / Superintendent / Supervisor</li> </ul>	Basic	x	5 days
Gas reservoir management	<ul style="list-style-type: none"> <li>Drilling Engineer / Superintendent / Supervisor</li> </ul>	Basic	x	5 days
	<ul style="list-style-type: none"> <li>Reservoir &amp; Production Engineer / Geologist / Completion Engineer</li> </ul>	Advanced	x	10 days
Horizontal and multilateral wells: analysis and design	<ul style="list-style-type: none"> <li>Drilling Engineer / Superintendent / Supervisor</li> </ul>	Basic	x	5 days

RESERVOIR ENGINEERING				
Course Title	Who should attend	Level		Duration
	<ul style="list-style-type: none"> <li>Reservoir &amp; Production Engineer / Geologist / Completion Engineer</li> </ul>	Advanced	x	10 days
Integrated reservoir modeling	<ul style="list-style-type: none"> <li>Drilling Engineer / Superintendent / Supervisor</li> </ul>	Basic	x	5 days
	<ul style="list-style-type: none"> <li>Reservoir &amp; Production Engineer / Geologist / Completion Engineer</li> </ul>	Advanced	x	10 days
Naturally fractured reservoirs: geologic and engineering analysis	<ul style="list-style-type: none"> <li>Drilling Engineer / Superintendent / Supervisor</li> </ul>	Basic	x	5 days
	<ul style="list-style-type: none"> <li>Reservoir &amp; Production Engineer / Geologist / Completion Engineer</li> </ul>	Advanced	x	10 days
New opportunities in old fields	<ul style="list-style-type: none"> <li>Drilling Engineer / Superintendent / Supervisor</li> </ul>	Basic	x	5 days
	<ul style="list-style-type: none"> <li>Reservoir &amp; Production Engineer / Geologist / Completion Engineer</li> </ul>	Advanced	x	10 days
Oil and gas reserves evaluation	<ul style="list-style-type: none"> <li>Drilling Engineer / Superintendent / Supervisor</li> </ul>	Basic	x	5 days
	<ul style="list-style-type: none"> <li>Reservoir &amp; Production Engineer / Geologist / Completion Engineer</li> </ul>	Advanced	x	10 days
Oil recovery enhancement techniques	<ul style="list-style-type: none"> <li>Drilling Engineer / Superintendent / Supervisor</li> </ul>	Basic	x	5 days
	<ul style="list-style-type: none"> <li>Reservoir &amp; Production Engineer / Geologist / Completion Engineer</li> </ul>	Advanced	x	10 days
Reservoir characterization: a multi-disciplinary team approach	<ul style="list-style-type: none"> <li>Drilling Engineer / Superintendent / Supervisor</li> </ul>	Basic	x	5 days
	<ul style="list-style-type: none"> <li>Reservoir &amp; Production Engineer / Geologist / Completion Engineer</li> </ul>	Advanced	x	10 days
Reservoir fluid properties	<ul style="list-style-type: none"> <li>Drilling Engineer / Superintendent / Supervisor</li> </ul>	Basic	x	5 days
	<ul style="list-style-type: none"> <li>Reservoir &amp; Production Engineer / Geologist / Completion Engineer</li> </ul>	Advanced	x	10 days
Reservoir engineering for other disciplines	<ul style="list-style-type: none"> <li>Drilling Engineer / Superintendent / Supervisor</li> </ul>	Basic	x	5 days
	<ul style="list-style-type: none"> <li>Reservoir &amp; Production Engineer / Geologist / Completion Engineer</li> </ul>	Advanced	x	10 days

**RESERVOIR ENGINEERING**

Course Title	Who should attend	Level		Duration
Reservoir management	• Drilling Engineer / Superintendent / Supervisor	Basic	x	5 days
	• Reservoir & Production Engineer / Geologist / Completion Engineer	Advanced	x	10 days
Reservoir simulation strategies	• Drilling Engineer / Superintendent / Supervisor	Basic	x	5 days
	• Reservoir & Production Engineer / Geologist / Completion Engineer	Advanced	x	10 days
Waterflooding A to Z	• Drilling Engineer / Superintendent / Supervisor	Basic	x	5 days
	• Reservoir & Production Engineer / Geologist / Completion Engineer	Advanced	x	10 days
Well test design and analysis	• Drilling Engineer / Superintendent / Supervisor	Basic	x	5 days
	• Reservoir & Production Engineer / Geologist / Completion Engineer	Advanced	x	10 days

**RESERVOIR GEOLOGY**

Course Title	Who should attend	Duration
Reservoir Characterization	• Drilling Engineer/Petroleum Engineer/Production Supervisor & Engineer	5 days
Reservoir Characterization from Seismic to Production and Original Hydrocarbons In Place	• Drilling Engineer/Petroleum Engineer/Production Supervisor & Engineer	10 days
Reservoir Characterization from Seismic to Production and Logging interpretation	• Drilling Engineer/Petroleum Engineer/Production Supervisor & Engineer	10 days
3D geological Model	• Drilling Engineer/Petroleum Engineer/Production Supervisor & Engineer	10 days
Reservoir for Petroleum Engineers	• Drilling Engineer/Petroleum Engineer/Production Supervisor & Engineer	5 days



<b>GEOPHYSICS</b>		
<b>Course Title</b>	<b>Who should attend</b>	<b>Duration</b>
<b>Basic Geophysics</b>	<ul style="list-style-type: none"> <li>• Drilling Engineer/Petroleum Engineer/Production Supervisor &amp; Engineer</li> </ul>	5 days
<b>Introduction to Seismic Stratigraphy</b>	<ul style="list-style-type: none"> <li>• Drilling Engineer/Petroleum Engineer/Production Supervisor &amp; Engineer</li> </ul>	5 days
<b>Stratigraphy and basin analysis</b>	<ul style="list-style-type: none"> <li>• Drilling Engineer/Petroleum Engineer/Production Supervisor &amp; Engineer</li> </ul>	5 days
<b>Seismic acquisition and processing</b>	<ul style="list-style-type: none"> <li>• Drilling Engineer/Petroleum Engineer/Production Supervisor &amp; Engineer</li> </ul>	5 days
<b>Seismic imaging of subsurface geology</b>	<ul style="list-style-type: none"> <li>• Drilling Engineer/Petroleum Engineer/Production Supervisor &amp; Engineer</li> </ul>	5 days
<b>2D / 3D seismic interpretation</b>	<ul style="list-style-type: none"> <li>• Drilling Engineer/Petroleum Engineer/Production Supervisor &amp; Engineer</li> </ul>	3/5/10 days*

\* According to the level

<b>PETROPHYSICS</b>		
<b>Course Title</b>	<b>Who should attend</b>	<b>Duration</b>
<b>Applied rock mechanics</b>	<ul style="list-style-type: none"> <li>• Drilling Engineer/Petroleum Engineer/Production Supervisor &amp; Engineer</li> </ul>	3/5/10 days*
<b>Capillarity in rocks</b>	<ul style="list-style-type: none"> <li>• Drilling Engineer/Petroleum Engineer/Production Supervisor &amp; Engineer</li> </ul>	3/5/10 days*
<b>Coring and core analysis</b>	<ul style="list-style-type: none"> <li>• Drilling Engineer/Petroleum Engineer/Production Supervisor &amp; Engineer</li> </ul>	3/5/10 days*
<b>Foundations of Petrophysics</b>	<ul style="list-style-type: none"> <li>• Drilling Engineer/Petroleum Engineer/Production Supervisor &amp; Engineer</li> </ul>	3/5/10 days*
<b>Integration of rock, log and test data</b>	<ul style="list-style-type: none"> <li>• Drilling Engineer/Petroleum Engineer/Production Supervisor &amp; Engineer</li> </ul>	3/5/10 days*
<b>Structural and stratigraphic interpretation of dipmeters and borehole imaging logs</b>	<ul style="list-style-type: none"> <li>• Drilling Engineer/Petroleum Engineer/Production Supervisor &amp; Engineer</li> </ul>	3/5/10 days*
<b>Well log interpretation</b>	<ul style="list-style-type: none"> <li>• Drilling Engineer/Petroleum Engineer/Production Supervisor &amp; Engineer</li> </ul>	3/5/10 days*

<b>PETROPHYSICS</b>		
<b>Course Title</b>	<b>Who should attend</b>	<b>Duration</b>
<b>Applied rock mechanics</b>	<ul style="list-style-type: none"> <li>• Drilling Engineer/Petroleum Engineer/Production Supervisor &amp; Engineer</li> </ul>	3/5/10 days*
<b>Wireline formation testing and interpretation</b>	<ul style="list-style-type: none"> <li>• Drilling Engineer/Petroleum Engineer/Production Supervisor &amp; Engineer</li> </ul>	3/5/10 days*

<b>INTERPRETATION SOFTWARE</b>		
<b>Course Title</b>	<b>Who should attend</b>	<b>Duration</b>
<b>Log scanning and vectorizing using Neuralog</b>	<ul style="list-style-type: none"> <li>• Drilling Engineer/Petroleum Engineer/Production Supervisor &amp; Engineer</li> </ul>	3 days
<b>Seismic scanning and vectorizing using Sphynx</b>	<ul style="list-style-type: none"> <li>• Drilling Engineer/Petroleum Engineer/Production Supervisor &amp; Engineer</li> </ul>	5 days
<b>Well data management in Geolog6</b>	<ul style="list-style-type: none"> <li>• Drilling Engineer/Petroleum Engineer/Production Supervisor &amp; Engineer</li> </ul>	3 days
<b>Geosciences data base organization – Introduction (3 days) and coaching</b>	<ul style="list-style-type: none"> <li>• Drilling Engineer/Petroleum Engineer/Production Supervisor &amp; Engineer</li> </ul>	3 days
<b>Introduction to Well log quantitative evaluation on Geolog6</b>	<ul style="list-style-type: none"> <li>• Drilling Engineer/Petroleum Engineer/Production Supervisor &amp; Engineer</li> </ul>	3 days
<b>Advanced well log interpretation on Geolog6</b>	<ul style="list-style-type: none"> <li>• Drilling Engineer/Petroleum Engineer/Production Supervisor &amp; Engineer</li> </ul>	3 days
<b>Seismic / Petrophysics on Geolog6</b>	<ul style="list-style-type: none"> <li>• Drilling Engineer/Petroleum Engineer/Production Supervisor &amp; Engineer</li> </ul>	3 days
<b>2D seismic data QC and interpretation on Kingdom suite</b>	<ul style="list-style-type: none"> <li>• Drilling Engineer/Petroleum Engineer/Production Supervisor &amp; Engineer</li> </ul>	3/5/10 days*
<b>3D seismic data QC and interpretation on Kingdom Suite</b>	<ul style="list-style-type: none"> <li>• Drilling Engineer/Petroleum Engineer/Production Supervisor &amp; Engineer</li> </ul>	3/5/10 days*

INTERPRETATION SOFTWARE		
Course Title	Who should attend	Duration
3D modeling	<ul style="list-style-type: none"> <li>• Drilling Engineer/Petroleum Engineer/Production Supervisor &amp; Engineer</li> </ul>	3/5/10 days*

\* According to the training level.

Software resources: GEOLOG6 / SURFER / GEOTOP / KINGDOM / GOCAD / SOFT de VECTORISATION