



## Special Petrophysical Tools: NMR and Image Logs

### MODULE

#### About the Skill Module

This skill module introduces Nuclear Magnetic Resonance (NMR) Logging, interpretation of Borehole Images and Dip Meter Data, and how permeability is measured in both logs and cores. The skill module covers NMR logging principles and interpretation and the importance and application of borehole image and dipmeter data.

[See example online learning module](#)

#### Target Audience

Geoscientists and engineers with less than twelve months experience using petrophysical data, Ideal for other technical staff and non-technical staff (e.g., management, drilling operations, technical support staff, finance, legal, IT, supply chain management, and others) at all experience levels wanting a basic background in the petrophysics discipline. This skill module lays the foundation for effective communications between the Subsurface Team and everyone else in the E&P Industry including Service Company and Government employees.

#### You Will Learn

Participants will learn how to:

- Describe NMR principles: proton recession and T1 and T2 relaxation in porous media
- Describe the NMR response to pore size, free fluid, trapped water, permeability, and water cut
- Characterize tool models, similarities, differences, and operational issues
- Define NMR permeability determination and bound water vs. free water
- Describe NMR saturation techniques and interpretation, including appropriate applications and limitations
- Determine permeability from conventional wireline logs
- Estimate permeability from empirical relationships
- Apply specialized tools, such as NMR and acoustic logs to estimate permeability
- Determine permeability from cores

#### Product Details

Categories: [Upstream](#)

Disciplines: Petrophysics

Levels: Basic

Product Type: Individual Skill Module

Format: On-Demand

Duration: 2 hours (approx.)

**\$250.00**