

Petrophysics and Formation Evaluation (3 credit hours): This course covers the basic methods of open-hole well log analysis, and covers logging suite choices. New logging developments and current research are also covered. Special focus on certain methods is provided (e.g. 3D VSP, borehole imaging, pore pressure prediction).

Course Outline

1. Introduction to petrophysics.
2. Basic petrophysical logging methods (nuclear, electrical, acoustic, imaging).
3. Application and use of basic SP, gamma ray, porosity and resistivity logs.
4. Lithology identification.
5. Identification of pay intervals.
6. Computer analysis.
7. Standard well logging suites.
8. Special logs and interpretation techniques.
9. New logging developments and research.