



Indian Institute of Technology

Course Details Report

Course No: PE6180

Course Name: Natural Gas Engineering

Course Type:

Theory

Description:

Properties and Measurement of Natural Gas: Phase behavior fundamentals, qualitative and quantitative phase behavior, vapor liquid equilibrium. Equation of state, critical pressure and temperature determination. Gas compressibility, viscosity and thermal conductivity, formation volume factor. Gas flow measurement, and fundamentals, Gas Reservoir Performance, Steady State Flow of Gas in Production Tubing, Temperatures profiling in flowing gas systems. Natural gas processing, Gas Compression, Gas Gath

Course Content:

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Text Books:

NIL

Reference Books:

1. Beggs, D, H, Gas Production Operations. Edition Technip. 1984. Chaudhary, Amanat U, Gas well Testing Handbook, Elsevier, 2003. Lee, J, Wattenbarger, R. A., "Gas Reservoir Engineering", Society of Petroleum Engineers, TX, USA, 1996. 4. Ikoku, Chi, "Natural Gas Production Engineering", John Wiley and Sons, 1984. 5. Kumar Sanjay, "Gas Production Engineering", Gulf Professional Publishing, TX, USA, 1987. 6. Mokhatab, s, Poe, W A and Speight, J G, Handbook of Natural Gas Transmission and Processing, Gulf Professional Publishing, 2006.