

PE-317 Natural Gas Engineering

Credit Hour

Theory = 2

Practical = 1

Course Content

Introduction

Properties of natural gas. Production, transportation, storage and gauging of gas. Sales gas customer requirement.

Facilities designing for gas processing

Gas field development, design of gathering systems, field treatment and processing of natural gas e.g: gas dehydration and gas sweetening. Compressors and horsepower requirements. Flow through pipelines and pressure drop. Gas hydrates, LNG, Storage of natural gas. Gas to liquids (GTL). Gas metering separator selection

Text book

1. Chi. U. Ikoku, Natural Gas Production Engineering, Latest Edition, Krieger Publishing, 1991.

Reference Book

1. William C. Lyons, Gary J Plisga, "Standard Handbook Of Petroleum And Natural Gas Engineering", Second Edition, Gulf Professional Publishing, 2004