

# **PE-320 Fundamental of Well logging**

## **Credit Hour**

Theory = 2

Practical = 1

## **Course Content**

### **Introduction**

Display of well-log data and graphical conventions, wellbore environment, the physics of mud-filtrate invasion.

### **Types of logs and its applications**

Principles and applications of: temperature logging, caliper logging, gamma-ray logging, spontaneous potential (SP) logging, density logging and litho-density logs, neutron logging, resistivity logging and sonic logging. Modern resistivity logging tools. Joint interpretation of density and neutron log measurements. Well logs interpretation. Cased Hole logging and production Logging. Group activities related to interpretation of real-world well log and reporting results

### **Text book**

1. H. M. Rider, "The Geological Interpretation of Well Logs" 3rd Revised edition, RiderFrench Consulting Limited, 2011.

### **Reference Book**

1. O. Serra, "Fundamental of Well Log Interpretations", 3rd Impression, Elsevier Science Publishers, 1988.