# 1 WEEK TRAINING PROGRAMME ON "OIL & GAS WELL DRILLING TECHNOLOGY AND NEW TRENDS"

#### **OBJECTIVE**

This course will provide an opportunity of training to drilling engineers of oil and gas companies and new teachers who intend to teach drilling engineering in B. Tech/M. Tech courses of Petroleum engineering. This course will be useful for PhD and M tech research scholars.

#### COURSE CONTENT

Geological exploration and Petroleum Geology. Geophysical exploration techniques, Objectives of drilling, Drilling types and applications. Drilling Methods, Drill Rigs, Rotary drilling types and operations, Hoisting operation equipment load on derrick, Power requirement etc. Rotary operations Design of drill string. Drill bits and coding system. Drilling fluid circulation, Drilling fluid types, Properties and Testing and mud maintenance. The Bore well problems related to mud. Pumps and compressors. Casings and cementing, Directional drilling. Well completion. Perforation. Safety in drilling operations. Well stimulation. Bore hole problems and remedies. Group gathering station ground facilities and treatment, Separators.

### RECENT TRENDS

Drilling for CBM, Shale oil and gas drilling, Drilling for HP HT Wells. . Measurements while Drilling, Logging while drilling.

## **LAB WORK**

Drilling fluid testing/ field visit.

#### **DURATION**

One week 17 July 2017 to 23 July, 2017

#### ABOUT IIT (ISM)



IIT (ISM) was set up by Government of India and formally inaugurated by the Vicerov Lord Irvin on 9th December 1926 on the model of Royal School of Mines, London. ISM was granted autonomy and become a Deemed University under UGC Act, 1956. In 1996, the Institute came under financial and administrative control of MHRD, Govt. of India. In the year 1997, ISM was affiliated to the IIT JEE for admission to its B.Tech programmes. ISM is situated in the heart of the country's prime coking coal belt, has a fully residential campus of its own consisting of a graceful blend of old world and new style buildings. The school today is making foray into the newer areas of academic endeavors in tune with the changing times. The school is located at a distance of 3 km from Dhanbad Railway Station. Dhanbad is well connected by railways with other important cities of the country like Chennai, Delhi, Kolkata, Mumbai etc. The nearest airports are Kolkata (260 km) and Ranchi (180 km). What started as an institution to impart mining education has graduated into a full-fledged technical institution of international acclaim offering a host of programmes like B. Tech., M. Tech., M. Sc. Tech., and MBA. In addition the School offers M. Phil. and full as well as part time Ph. D. programmes, while also awarding D.Sc. as the highest degree of academic achievement.

# ABOUT DEPARTMENT OF APPLIED GEOPHYSICS

Department of Applied Geophysics was established in

1957. The world of geophysics is enormous and fascinating. Many are attracted to geophysics because of their fascination with earthquakes, volcanic eruptions, and other natural hazards. Others are drawn by their interest in hot topics such as climate change, carbon management and geothermal energy. Still others love the process of discovery associated with exploration—Petroleum exploration, Mineral exploration, Exploration for water, or Planetary exploration. The Department of Applied Geophysics offers the 3 Year M Sc. Tech. in applied geophysics, 5 years Integrated MSc. Tech in applied geophysics. The department also offers 5 Years Integrated M.Tech in applied geophysics for IIT-JEE admitted candidates from geophysics. The department offers 2 years course on M.Tech.-EDHRM and jointly 2 years M.Tech-PEX course with geology department.

#### **COURSE FEE**

- Rs.25, 000 for one week program including boarding, lodging, field visits and course materials and stationary etc.
- For teachers course fee will be Rs. 15000/-.
- For students course fee will be Rs. 10000/-excluding boarding, lodging.
- For IIT (ISM) Students course fee will be Rs. 500/excluding boarding, lodging.

The course fee is payable by demand draft drawn in favor of Registrar IIT(ISM) Dhanbad. The DD will be delivered to the address: Kind Attn.: Dr. S. Datta Gupta, Department of Applied Geophysics, 5<sup>th</sup> Floor, Academic Complex, IIT(ISM) Dhanbad, PIN – 826004



TRAINING PROGRAMME ON
'OIL AND GAS WELL DRILLING AND RECENT TRENDS"

OIL AND GAS WELL DRILLING AND RECENT TRENDS
1.Name:
2.Mailing Address:
3.Branch & Department:
4. Contact/ Mobile No.:
5.Category:
(Student/Faculty/Scientist/Industrial Person)
6.Mode of Payment & details:
7. Whether Boarding and Lodging required: YES/NO

#### COORDINATORS

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